



# Factors Responsible for the impact of Post Partum Depression on the Productivity of Working Women in the Era of Covid-19

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**Abstract** The study attempts to analyze the relationship of postpartum depression with the productivity of working women in the economy during the era of Covid-19. Several antecedents affecting postpartum depression are being evaluated and analyzed to provide a framework where the organizations can understand its critical nature and as well as can plan the required activities that may reduce its impact on women so that hyper-efficient organizations can be built. All these factors have a critical impact on the productivity of working women and thus may also affect the economy. The researcher surveyed 100 respondents through a questionnaire.

**Keywords:** Postpartum depression, productivity, baby blues, attrition rate, absenteeism, Covid -19

## INTRODUCTION

Postpartum depression is grabbing the attention of numerous people because even though it is intangible, its impact can be seen and felt in women across the globe. According to a study conducted by (Bharathy A, 2018), in a recent poll published by Times Jobs 2017, the vast majority of working women do not find their workplaces to be female-friendly<sup>[1]</sup>. This is especially important now as our country has a large and diverse youthful workforce, including men and women, and more women are beginning to enter the workforce.

According to (Upadhyay RP, Chowdhury R, Aslyeh Salehi, Sarkar K, Singh SK, Sinha B, Pawar A, Rajalakshmi AK, Kumar A , 2017) “Even though India’s national mental health program was launched in 1982, maternal mental health is still a minor program component”<sup>[2]</sup>. According to the literature reviewed, the contributing components include physical, environmental, and emotional aspects, all of which impact productivity. Hormonal changes that occur during childbirth may be among the physical reasons. Another crucial physical factor is a lack of quality sleep. The stress and worry that comes with taking on new responsibilities and taking on a whole new and different role, in addition to the physical considerations, play a significant influence on PPD.

The quality of the female’s physical surroundings, the type of social environment, whether or not the female is given the power to decide on routine and big decisions in her life, and the type of communication done by the female are all examples of environmental elements. However, a variety of psychological characteristics appear to be crucial in determining success. According to (Terry DJ, Mayocchi L, Hynes GJ ,1996) Postpartum depression is more likely to occur in women who have had previous emotional difficulties (both before and during pregnancy)<sup>[3]</sup>

In each woman’s life, there is a complex history of relationships that has been marked by difficulties, misunderstandings, incorrect views, and possibly unintentional mistakes. Each mother’s experience is a unique narrative of how her child or children were conceived. If this story causes her to wonder if she is ready for this new responsibility or will be able to cope with this new stage of life, all she encounters is a series of questions, the existence of which is referred to as Postpartum Depression. A woman’s emotional and psychological wellbeing might be severely harmed by this phenomenon, which is more than a physical disease in itself. The most important thing about Postpartum depression is that it is intangible. But its impact can be seen and felt on women around the globe. Evidence suggests that the lack of such assistance is associated with an increased risk of postpartum depression

According to an article written by Maria Jose Prados, Ph.D. and Gema Zamarro on August 20, 2020, in “The Evidence Base: Informing Policy in Health, Economics, and Well-Being,” “Due to the COVID-19 pandemic, schools and daycare centers across the country closed in March 2020”, and childcare needs skyrocketing. Simultaneously, “social distancing recommendations and stay-at-home orders have made it difficult, if not impossible, for informal caregivers like grandparents or other family members to assist with child care responsibilities. This situation is difficult for people who work from home and those who continue to work outside the home. Women, particularly working mothers, may bear the brunt of the negative consequences. Before the crisis, women already carried a heavier burden than men in

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providing child care, and child care arrangements are critical determinants of the female labor supply. While the current crisis' employment shock initially affected both genders, the COVID-19 public health crisis could have a significant impact on women, particularly on their career trajectories and the wellbeing of working mothers".

"Dr. Rohaidy's colleague, Graciela Jimenez, a psychotherapist with Baptist Health, explained, The usual recommendations we make to moms with postpartum depression are not easy to implement during COVID-19. We tell them to be social, get out of the house and ask friends or family members to come over and support them. Now, new moms are at home without the extra help they need to care for themselves, their home, and their newborn." If one feels worried about family and their safety because of the coronavirus, that person, like many other moms, is just maybe overly cautious right now.

## REVIEW OF LITERATURE

(Kumar, 1994) stated, "except for a few notable exceptions, the majority of relevant research into psychiatric disorders associated with childbearing has been conducted in developed countries, primarily in Western Europe and North America"

According to this theory, some societies are said to have no postpartum depression at all. There was remarkably little evidence of postnatal depression in the anthropological literature, According to anecdotal evidence from Nigeria, South Africa, and India, non-psychotic postpartum depression is extremely rare in these countries; this finding was bolstered by anecdotal evidence. Higher rates of maternal morbidity, on the other hand, could lead to the under-reporting of cases. Authors point out that the definition of depression varies considerably between cultures, "therefore the problem cannot be solved by simply adopting a Western notion of depression to other cultures. Comparative research in cross-cultural settings tries to determine if there are differences in the clinical presentation in different contexts". 'Amikiro,' when women express the desire to devour their baby. Similarly, it's critical to determine whether or not observed variations in childrearing methods mitigate or exacerbate the adverse psychological effects of maternal postnatal sickness on the child. "In the era of social distancing, the support systems that usually promote mental health during the vulnerable transition into motherhood, such as social support from family and doulas, are missing. This makes new mothers even more at risk for mental health issues"

"Postpartum depression is the result of a dynamic interplay between biological, psychological, and social risk factors, all of which can be amplified by the current pandemic. However, COVID-19 presents unique barriers to engaging supports, particularly those outside the home. Partners are a logical first choice, but if one is not present (or able), it may be helpful to seek outside help from family or friends. It's crucial to ensure that anyone who comes in contact with new mothers and infants is at low risk for the coronavirus".

## JULI FRAGA WROTE ON THE EDITOR'S PICKS, THE LILY

"On March 18 — a day before California became the first state to issue a stay-at-home order — Courtney Pladsen, 34, a nurse practitioner who lives in Portland, Me., gave birth to her first child. Like many of the hundreds of thousands of U.S. women who have given birth during the coronavirus pandemic, Pladsen's life was turned upside down.

Pladsen and her husband had lined up support in preparation for parenthood: a lactation consultant to help with breastfeeding, a physical therapist to aid in postpartum recovery, and visits from family and friends. To ease the stress of new motherhood, Pladsen also planned to attend a support group for new moms."

In a research study "Do Antenatal Religious and Spiritual Factors Impact the Risk of Postpartum Depressive Symptoms? " Six constructs of religiosity/ spirituality were evaluated: organizational religious activities, non-organizational religious activities, intrinsic religiosity, daily spiritual experiences, self-rated spirituality, and self-rated religiosity<sup>[4]</sup>.

(O'Hara and Swain's, 1996) meta-analyses included 14 studies of approximately 3000 subjects that examined the mother's previous psychiatric history and postpartum depression. Beck's (2001) meta-analyses included 11 studies that examined about 1000 subjects<sup>[5]</sup>. "Both meta-analyses found that a previous history of depression was a moderate to strong predictor of subsequent postpartum depression. Subsequent studies consistently report that women with a prior history of postpartum depression are at increased risk of developing postpartum depression (Howell, E.A., Bodnar-Deren, S., Balbierz, A. et al , 2014)"<sup>[6]</sup>.

## GAP ANALYSIS

The research gap is a problem that has not been addressed so far in a particular field. It leads to the progression of a field of research. It can be visualized as an opportunity for new researchers. It is that knowledge gap that is yet to be researched. Few areas are unexplored in previous studies as well as insufficiency is also found in such areas. It can be justified as a missing link in the existing body of knowledge for which new parameters are proposed.

- These insufficiencies and uncharted facts in postpartum depression motivate the researcher to study them and propose a new model to bridge that gap. In this proposed study, the researchers are trying to fill the gap with the help of some new phenomena like Spiritual Factors, Ergonomics at the Workplace, taking as explanatory variables with Cultural Factors, Environmental Factors and Psychological Factors considered in earlier studies. The researcher will also try to find the effect of selected demographic factors on the productivity of female employees carrying postpartum depression. The proposed research will also attempt to find the Marital Relationship between postpartum depression and productivity.

- Kornfeind K, Sipsma H mentioned in their research paper “Exploring the link between maternity leave and postpartum depression” that currently there is little evidence on the relationship between maternity leave and maternal mental health even though the workforce includes now more working women than in the past. They also mentioned that there is a lack of awareness about the emergence of postpartum depression amongst both employees and employers
- An important limitation is being rightly discussed in the research paper titled “Employment, income, and education and risk of postpartum depression: The Osaka Maternal and Child Health Study” by Miyake Y, Tanaka K, Sasaki S and Hirota Y which describes that it is extremely difficult to ascertain the level and extent of postpartum depression as EDPS is a self-reporting rating scale which is widely used to analyze its prevalence especially in the area of social science
- Another limitation is being raised in the context of a highly acknowledged model on this field of study i.e demand-control –support model that it didn’t elucidate much of the disparity in the context of women’s postpartum depression scores, especially when it comes to the comparison with perceptions of control over work and family. The research paper titled “The psychosocial work environment and maternal postpartum depression” by Dagher, Rada K., Dagher, Rada K. Alexander, Bruce H, Dowd, Bryan E, Dowd, Bryan E and McCaffrey, David J lays down the foundation for future researchers to evaluate the impact of work environment and home environment in the respect of postpartum depression
- One major limitation is observed in the perspective of lack of literature using the term employee assistance program in addition to postpartum depression due to which multifaceted issues are being faced by women during postpartum depression left unresolved. Ledesma Ortega, Cyntianna C and Reio, Thomas G state in their research paper titled “Interventions for Women With Postpartum Depression Symptoms: An Integrative Literature Review for Human Resource Development” that EAP will help women to address such issues and will help women to deal with transitional issues while returning to the workplace.
- A study conducted by Bai, Yeon K., Wunderlich, Shahla M. and Weinstock, Marni named “Employers’ readiness for the mother-friendly workplace: An elicitation study” discusses that homogenous samples are considered as a limitation in this area of work therefore they suggested the future researchers work ethnically and geographically diverse employers thus arising the need to study cultural factors in depth

## RESEARCH OBJECTIVES

Based on the extensive literature review and the gap found by the researcher, the following objectives are framed to carry out the proposed research:

## PRIMARY

- To analyze the impact of postpartum depression on productivity of working women

## SECONDARY OBJECTIVES

- To check the difference between the age of working women and productivity during postpartum depression
- To check the difference between the income of working women and productivity during postpartum depression
- To check the difference between the education of working women and productivity during postpartum depression
- To check the difference between a family of working women and productivity during postpartum depression
- To check the difference between the type of employer of working women and productivity during postpartum depression
- To check the difference between the location of residence and productivity during postpartum depression

## RESEARCH METHODOLOGY

The data was collected through primary sources. A standard questionnaire was modified for this purpose. 100 respondents participated in this research work from across the country belonging to various age , income and family groups. Working women were considered as a sample for this study.

## CONCEPTUAL DEVELOPMENT

Although a collection of huge factors frames postpartum depression, these factors can be categorized as:

**Emotional Factors:** These factors affect the self-esteem of a woman. “A new mother usually requires a high level of support, and postpartum depression occurs due to a lack of social support”. A new mother is generally vulnerable to increased anxiety and stress. Especially in the cases of cesarean delivery, a new mother requires more attention and love. The amount of time a mother is in the hospital affects her emotional wellbeing. The new mother is not used to all these changes, thus affecting the emotional wellbeing of a new mother. Emotions play a vital role in forming the psychological health of a working woman. Emotional intelligence is essential for an employee’s performance as it represents a combination of interconnected and interdependent skills and capabilities that an individual; posses following the emotions to augment the thought process of an individual. According to (Devonish, D., 2016), the affective events theory (AET) also provides a strong base for the relationship between emotional intelligence (EI) and the behavior of an employee on the job; it can have both direct and indirect impacts on the employee’s work behavior<sup>[7]</sup>

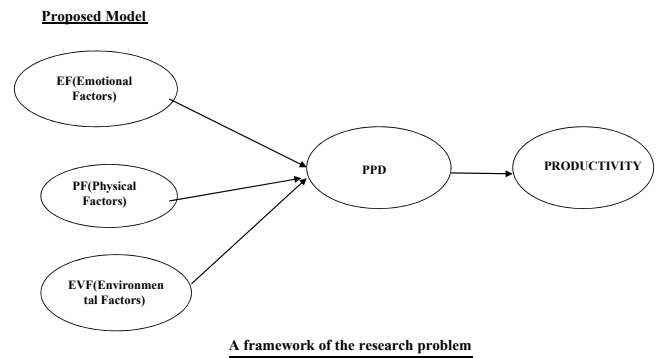
- **Physical Factors:** The biological factors may include physical pain from the delivery of sleep deprivation. Sometimes a new mother is also conscious about the physical attractiveness after the delivery.

- Environmental Factors: Environmental factors may include the surroundings of a mother and the various aspects that can be related to the same. A prominent theory in this field of study called behaviorist theory puts forward the way for an unexpected and profound change (like how a woman experiences during the prenatal period) in a person’s surrounding environment causes a decline in the affirmative and rewarding activities. Most women experiencing postpartum depression frequently experience increased levels of apprehension. Likewise, they cannot relax or go back to sleep after waking up to take care of the infant in the night. Authors examined the importance of an employer in this context and said that although employers perceive a decline in productivity by providing a mother-friendly environment, on the contrary, a mother-friendly climate enhances the satisfaction of employees, boosts the savings of company from health care costs and also reduces the rate of absenteeism in the company
- A study conducted by (Beck, C. T, 2002) included Suyes suggests mothers who are working may face various issues at the Workplace related to difficulties to carry on breastfeeding, and organizations should strive hard to provide a mother-friendly environment so that these difficulties can be reduced [8]

## POST-PARTUM DEPRESSION (PPD) AND PRODUCTIVITY

Each woman brings with her a complicated history of relationships filled with challenges, misunderstandings, misguided views, and perhaps unintentional mistakes. The tale of how her kid or children came to be is unique for each mother. On the other hand (Belinda Hewitt, Lyndall Strazdins, Bill Martin, 2017) in the present era, many women are resuming their work after having children to take care of, which happens to be a natural phenomenon following motherhood [9]. As a result of this experience, her thoughts turn to whether she is ready to take on this new duty or whether she can handle this new chapter of her life, which is known as Post Partum Depression. In addition to being a phenomenon or medical condition, it can also be a substantial source of psychological and emotional distress for women’s productivity

In layman’s terms, productivity is a measure of efficiency. Productivity can be measured by the number of units produced, the number of hours spent on the job, or by client feedback, but the main goal of any organization is to improve overall productivity. Eventually, they are either confronted with a choice between the two or give up one out of these. The prior studies in this field explain that depression is a leading factor for productivity-related issues at Workplace. Studies by (Glass DC McKnight JD, 1996) show that it can spoil an employee’s capability to concentrate, be effective, and stay healthy enough to hold down a job [10]



## FINDINGS

The study highlighted three main factors affecting postpartum depression: physical, emotional, and environmental factors. For the respondents analyzed, it was found that there is a high probability of such elements in creating a medical condition called Postpartum depression. The study further emphasized that Postpartum depression usually results in a lack of concentration and lower productivity. Postpartum Depression contributes to various other issues like higher attrition rates and higher absenteeism.

## RESULTS

### REGRESSION TEST:

H<sub>0</sub>: There is no significant impact of efact,pfact,enfact on productivity

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Durbin-Watson
1	0.41	0.489	0.468	1.048376

a. Predictors: (Constant), efact,pfact,enfact

b. Dependent Variable: productivity

This table provides the R and R<sup>2</sup> value. The R Value is 0.41 a positive correlation between both variables. The R<sup>2</sup> indicate how much of the dependent variable, “productivity”, is explained by the independent variable, “efact, pfact and enfact.”, is 46.8%

### ANOVA<sup>a</sup>

Model	Sum Of Squares	Df	Mean Square	F	Sig.
1Regression	16.946	1	16.946	22.81356	0.00000
Residual	41.443	99	3.188		
Total	58.389	100			

a. Dependent Variable: productivity

b. Predictors: (Constant), Predictors: (Constant), efact,pfact,enfact



This table indicates that the regression model predicts that the outcome variable is significantly well. Here  $P < 0.000$  and indicates that, overall, the model applied is statistically

significantly predicted the outcome variable. The P-Value of F statistics (.000) < Standard value 0.05, hence  $H_0$  is rejected.

**Coefficients<sup>a</sup>**

VARIABLE	COEFFICIENT	STD.ERROR	T STATISTIC	PROB.
C	-21.09630	8.287490	-2.545560	0.0125
Efact	0.446913	0.063982	6.984926	0.0000
Pfact	-1.045136	0.518538	-2.015545	0.0467
Enfact	0.770967	0.389529	1.979230	0.0493

a. Dependent Variable: productivity

The outcome of the regression model has shown that the Prob. value of t-statistic of independent variables; *efact* (0.0000), *pfact* (0.0467) and *enfact* (0.0493) respectively is less than 0.05 so, there is a significant effect of *efact*, *pfact*, and *enfact* on productivity.

**IMPLICATIONS**

**Conceptual Implication:** Apart from the factors listed above it was found that some other factors may also contribute to Postpartum depression and such factors may also be analyzed in future researches, these factors may include heredity, lack of communication with the partner, intake of any chemical substances, lack of family support and a history of medical health issues.

**Managerial Implication:** The adverse impact of Postpartum depression can affect the overall productivity of an organization, it may also affect the key issues in the organization as well as major managerial decisions because many females are handling a key role in the organization thus creating a major concern for the organizations. Postpartum depression also affects the environment of the organization because a female may become hostile in this medical condition which may hamper the relationships between the employees. It also affects the attrition rate as well as absenteeism in the organization thus creating a major threat for an organization.

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