

Symptoms of Postpartum Depression in New Mothers – A Literature review

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Abstract

Postpartum depression (PPD) is a common mental health issue that some women face after the childbirth, generally within 6 to 8 weeks (about 2 months) of giving birth. This intricate condition affects a woman's emotional well-being during the postpartum phase, potentially disrupting the natural transition to motherhood and posing challenges to her mental health. Healthcare professionals play a fundamental role in identifying and addressing PPD using evaluation, early recognition, and implementing suitable treatment.

This study aims to determine the indicators of postpartum depression symptoms in new mothers by conducting literature reviews of different academic studies. The study's purpose is to generate evidence-based data that academic researchers and students can use to evaluate postpartum depression symptoms.

The methodology used in this study was a literature review based on an in-depth study and understanding of the literature addressing the research question. The data search was conducted using CINAHL, PUBMED, and EBSCO, and it was free and available to JAMK students.

After an in-depth study of selected literature, the symptoms of postpartum depression identified in the new mothers are emotional, physical, behavioral, social, and relationship symptoms. In addition, these findings can help future academic researchers to conduct further research on a similar subject as well as these findings can help medical personnel improve holistic interventions to support postpartum women.

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LIST OF ABBREVIATIONS

CINAHL	Cumulative Index for Nursing and Allied Health Literature
EPDS	Edinburg Postnatal Depression Scale
PPD	Postpartum Depression
PND	Postnatal Depression
WHO	World Health Organization
PDSS	Postpartum Depression Screening Scale
PICOS	Population Intervention Comparison Results
CBT	Cognitive Behavioral Therapy
IPT	Interpersonal Therapy
WHO	World Health Organization

1. Introduction

Postpartum is the time after childbirth, during pregnancy and the period after childbirth can cause significant transformation in a woman's physical and mental state (Chauhan & Tadi, 2022). The experience of childbirth is beautiful and, at times can be a potential traumatic experience for the mothers based on multiple factors like health conditions, environmental conditions, social influences, and financial factors (Rodríguez-Almagro et al., 2019). The first 12 months after childbirth is a major transition for the parents and has a bigger impact on mother compared to the father as the mother is actively taking care of the newborn (Barimani et al., 2017). After the birth of child in some woman emotional, and behavioral changes happens that can be linked to environmental, social, and financial factors combined with personality factors like low self-esteem, powerlessness, being overwhelmed by stress, etc. which can possibly make a person more vulnerable to depression during postpartum period (Rosander et al., 2020).

Typically, the symptoms of baby blues are resolved within three-five days after giving birth. However, if these symptoms continue to persist the probability of being vulnerable to depression is high on new mother (Shorey et al., 2018). Post partum depression (PPD) is a serious mental health issue affecting a considerable number of new mothers worldwide which can have negative impacts on both mother and newborn, like poor bonding with the baby, development delays, psychiatric and medical disorders (Slomian et al., 2019) and it is a common mental health condition affecting many mothers worldwide (Saharoy et al., 2023c). As the occurrence of postpartum depression rates varies across the different geographical regions although it affects 17% women worldwide it becomes of utmost importance to prioritize the wellbeing of both mother and child encompassing prenatal period, childbirth, and the postnatal phase (Shorey et al., 2018).

Research studies have proven that if PPD symptoms are detected and treated early, it can have a positive impact on both the mother and infant's well-being (Goyal & Lee, 2010). Recognizing PPD symptoms in new mothers can be difficult or it is very unclear as it remains undetected or poorly treated (Cho et al., 2022). It is essential to monitor and address the women mental health during postpartum period for the wellbeing of both mother and the infant which points towards the need of more thorough and evidence-based research to figure out the signs of symptoms of PPD as the postnatal period

is a critical phase for both mother and newborn child (Garapati et al., 2023). It is estimated 20% of women suffer from PPD globally (Radzi et al., 2021).

This study aims to identify the potential indicators of postpartum depression symptoms in new mothers with the help of integrative review of existing academic research. The methodology followed in this study is literature review which ensures that all the selected studies answering the research question are included and analyzed. The result of this study will be evidence-based information based on facts and can be helpful for academic researchers, students, and health workers to recognize symptoms of PPD in new mothers.

2. Postpartum Depression

Postpartum depression (PPD) is a mental health issue suffered by mothers of newborns who typically have it at the end of the baby's delivery up to nearly 4 to 6 weeks after the delivery (Slomian et al., 2019c). This relates to the effect on a woman's emotional health in the postpartum period, outcomes poor maternal quality of life impacting infant development that can interfere with the natural way of motherhood (Shang et al., 2022). PPD represents the manifestation of psychological, emotional, and behavioral characteristics, but together, creates distress and affects the mother's overall functioning (Postpartum Depression - Symptoms and Causes - Mayo Clinic, 2022). It is different from baby blues as baby blues last for a fleeting period, whereas postpartum depression affects the sufferer more severely and it prolongs in the long term, which can interfere with a new mother's daily activities (Radzi et al., 2021). Thus, it may negatively influence her ability to provide care for herself and her newborn (Alba, 2021c). PPD is associated with the multidimensionality of the hormonal, biological, psychological, cultural, familial, and social factors (Bina, 2008). It is likely and includes the person's sensitivity to illness, cycles of hormones, hereditary susceptibilities, psychological stresses, can exacerbate family relationships and threaten the general well-being of the entire family (Radzi et al., 2021).

PPD detection, providing appropriate support and proper nursing intervention can play a vital role in improving the overall health of new mothers, newborns, and entire families (World Health Organization: WHO, 2022). In this regard, healthcare professionals

can be helpful in assessing, early identification, and employing suitable nursing interventions for PPD (Branquinho et al., 2022). When one comprehends the mechanisms of PPD and the effects of the illness, researchers, healthcare professionals, policymakers, and the community can jointly develop reliable prevention and intervention strategies to develop a holistic approach that can minimize stigma, create strong support networks, and deal with the needs of women in PPD phase (Colizzi et al., 2020).

2.1. Nursing Intervention in treating PPD

The widely used tool to detect PPD is Edinburgh Depression Screening Scale (EPDS) it is a 10-item self-report scale to screen for PPD and this tool helps to conduct a methodical clinical interview and provide robust measure for accessing PPD (Cox et al., 1987). This tool maintains considerable ability in accurately detecting postnatal depression, thus underscoring their pivotal role in diagnosing this condition with utmost effectiveness (Beck & Gable, 2001).

Motivation and counseling

Encourage motherhood to remain in touch with her immediate network as friends and family may be a crucial source of moral and practical support (Belleza, 2023). Additionally, nurses can provide round-the-clock support to those who need it after childbirth, face-to-face or via phone. (Meng et al., 2021).

Peer support

Besides good friends support, the most useful can be the opportunity to meet other women at the same stage of life with whom one can share the mental and emotional experience of motherhood because interacting with fellow mothers going through a similar experience may bring up all kinds of thoughts concerning insecurities, feelings, and concerns, which can relieve distress (Kamalifard et al., 2013). Peer support can play vital role on easing the postnatal depression risk among high-risk postpartum women as those who received peer support demonstrated the 50% lower risk of developing postnatal depression compared to the control group at the 12-weeks (Dennis et al., 2009).

Individual and group therapy

Cognitive Behavioral Therapy (CBT), as a host of other models, may be able to provide potential solutions to the problems of significant depression as it is widely used evidence-based psychological interventions for treatment for psychiatric conditions (Gautam et al., 2020). In this respect, CBT promotes a shift in negative ideas and behaviors as well as provides support for the treatment of postpartum depression by the means offer coping mechanisms, making them essential in the recovery pipeline (Fitelson et al., 2010). While screening is critical, it must also emphasize that evidence-based interventions are required if the screening test is positive. Likewise, group therapy could be the method employed for conducting the treatment of PPD (Goodman & Santangelo, 2011).

Interpersonal Therapy

Interpersonal therapy (IPT) provides time-limited help towards managing major depression by exploring how relationships are related to a person's feelings against the backdrop of social existence and it makes it easier for the patients and the medical person to recognize the dynamics of interpersonal challenges like role transition or conflicts as these techniques would change relationships for 12 to 20 weeks and progressively uplift social support (Markowitz & Weissman, 2004). IPT is a different form of treatment that is modified for postpartum depression which deals with the relationship between the mother and the baby, the relationship with her partner, and the difficulties of returning to work its intervention is crafted specifically in correspondence with the unique demands of postpartum mothers (Fitelson et al., 2010).

Encourage rest and breastfeeding.

The improved sleep quality, rise in breastfeeding self-efficacy, reduced breastfeeding discomfort, lack of prenatal depression, and enhanced infant feeding increase the possibility of lower postpartum depression among women (De Sá Vieira et al., 2018). In addition, it is important to research the effectiveness of the program in improving the quality of sleep and transitioning to breastfeeding adaptation as well as prenatal depression prevention (Lee & Cho, 2019). Breastfeeding is supportive it enhances the mother and newborn bonding of which outcomes will prevent the PPD, as this intervention

expected to reduce the feelings of loneliness and lack of support, decrease parental anxiety by educating women on infant feeding prompts and sensitivity to their child's needs, ease breastfeeding problems like low milk supply and parenting stress, and enhance breastfeeding self-efficacy (Lenells et al., 2021).

2.2 Effects of PPD on baby and mother

The evidence is increasingly growing that postpartum depression (PPD) can derail the bonding between the mother and the child, which can lead to long-lasting consequences for the child's development, well-being, poor cognitive function, behavioral inhibition, emotional maladjustment, violent behavior, and psychiatric and medical disorders in adolescence (Slomian et al., 2019). When these symptoms of depression happen to a woman during pregnancy and after giving birth, the development of a mother-child relationship in which both have a connection to each other may get impeded as the moms with depression frequently express less warmth, less physical contact with baby such as hugging, cuddling because physical contact is essential to promote the mother child bonding (Saharoy et al., 2023b). Infants born to mothers with PPD can have problems related to feeding and sleep pattern, which in turn may become severe issues like failure to thrive as well. Consequently, this can trigger notable setbacks in the child's cognitive, language, and motor skill development (Alba, 2021).

Additionally, mothers experiencing depression are more prone to adopting suboptimal and riskier behaviors in caring for their infants, in stark contrast to mothers who are not depressed. For example, they may fail to adhere to the recommended practice of placing infants on their backs for sleep or using the proper car seats or they might become more prone to smoking or even an increased prevalence of suicidal ideations (Slomian et al., 2019b). Frequent intrusive thoughts which include violence involving one's baby are common during PPD phase due to which mothers can feel fear and shame, whereas in real world which very rare to result in violence (Mason, 2022). On top of these difficulties, these mothers had to nurse themselves, lack of sleep makes them feels like if they can nourish their babies or not and they start to feel like they are not good enough as caregivers (Alba, 2021c).

Tragically, suicide is a standout exception as an exceedingly terrible outcome of PPD, making it one of the leading causes of maternal mortality, particularly within the first

year after childbirth (Esscher et al., 2016). Around 13% to 36% of maternal death are due to suicide which turns out to be devastating situation to the newborns and the family (Lommerse et al., 2018). Moreover, maternal suicide is linked with history of psychiatric disorder, social and economic condition and finally lack of access to healthcare service during PPD phase (Jago et al., 2021).

Family experience

Mothers and fathers struggled with their feelings of inadequacy regarding expenses meanwhile fathers tended to explain their feelings of inadequacy and powerlessness this was related to the father's expectation for themselves and in a role as father (Pedersen et al., 2021). At the same time, mothers emphasized their feelings caused by internal pressure, which led to more stress run because of reported cases of pregnancy complications or unpleasant delivery experiences were closely related to postpartum depression and anxiety in mothers (Johansson et al., 2020). Surprisingly, the occasions affected not only the father's health but also their mental condition as the father who attended births may feel they are unable to support their partner or force to attend the birth (Bradley & Slade, 2011). The EPDS scale is used as a tool to diagnose postpartum depression to document a wide diversity of cases in terms of seeking support for child health care by families (Lagerberg et al., 2011). The emotional battles in the families of origin, demeaning their parents, contribute to the vulnerability that stems from the old traumas. These factors probably contributed to the increased severity of depressive symptoms in mothers in the long run (Johansson et al., 2020).

3. Study Aim, Purpose, and Research Question

Aim:

- The aim is to determine the indicators of postpartum depression symptoms in new mothers by conducting literature reviews of different academic studies.

Purpose:

- To generate evidence-based data that academic researchers and students can use to evaluate the symptoms of postpartum depression in new mothers.

Research study question:

- What are the symptoms of postpartum depression in a new mother?

4. Methodology

Literature review is search and assessment of the existing literature on a precise topic or chosen topic and helps a researcher get into the discussion by giving background info, guiding how the research is done, finding new ideas, avoiding repeating studies, and making sure professional standards are followed and focused on optimum utilization of human resources, search tools (databases/search engines) and existing literature. As a result, these findings will substantially contribute on planning and conducting of future research (Maggio et al., n.d.). Likewise, literature review systematically analyzes the past research where author compares, classifies, draws conclusions based on previous findings like findings gaps in research and propose the further studies. An independent literature review is appropriate for a beginner/trainee researcher as the source is already published and easily available on well-known medical databases/journals (Aveyard, 2018). Likewise, qualitative research allows for richer and in-depth understanding of a process or phenomenon and over past two decades qualitative research in healthcare has become increasingly important and wide spread as qualitative research targets to generate in-depth accounts from individuals and groups by multiple ways like talking to people, watching their behavior, analyzing their artifacts within different contexts in which they are based (The Importance of Qualitative Research | SingHealth, n.d.).

The methodology applied in this study was a literature review built upon a deep understanding and comprehensive research on the literature answering the research question. The method applied in this review summarizes the existing literature, including academic reviews, research results, levels, tools, and methodologies used, findings, etc.

4.1 Literature search

The Literature search was based on the inclusion criteria presented in Table 1 within well-known databases PubMed, CINAHL, and EBSCO using search keywords "postpartum depression," "postpartum depression in new mothers," "postpartum depression," and "symptoms of postpartum" with a combination of Boolean AND, and OR operator as mentioned in Table 2, as well as the manual search was conducted in the university library and through reference lists of identified articles that complemented the databases searches. As stated in the inclusion criteria, only peer-reviewed literature published in

well-known journals was selected to ensure that the chosen articles include original research studies and that resources are trustworthy, neutral, and established on facts, so after vigorous literature search and multiple stages of screening of literature as shown in Figure 1. based on the inclusion criteria defined in Table 1. nine articles were chosen for this study.

Inclusion Criteria	<ul style="list-style-type: none"> • Literature published in academic Journal. • Literature published from 2016 to 2023. • Articles focus on postpartum depression symptoms in new mothers. • Literature is derived from scholarly articles. • Studies focus on human participants. • Studies that address research questions. • Research written in English. • Articles free of cost for JAMK students.
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Table 1. Inclusion Criteria

After rigorous search of literature in well-known databases, the results are presented in below Table 2.

Database	Postpartum Depression AND New Mothers	Symptoms of Postpartum AND New Mother	New Mother OR Postpartum Depression	Postpartum depression in new mothers	Postpartum Depression AND Mental Health
CINAHL	12	14	12	7	10
Academic Search Elite	8	5	7	8	8
PubMed	6	8	9	6	7
Total	26	27	28	21	25

Table 2. Search Results from different database.

Likewise, the PICOS for this study is defined in below Table 3.

Population (P)	New mothers' postpartum phase, new mothers experiencing PPD
Interventions (I)	Nursing intervention, treatment for PPD
Co (Context)	Experience, Perspective
Outcome (O)	Symptoms of PPD
Study (S)	Published 2011 to 2023, peer reviewed journals, journal articles, full text available English.

Table 3. PICOS Criteria

The flowchart for the literature selection process is presented below in figure 1. And the figure below is based on the data presented in table 2.

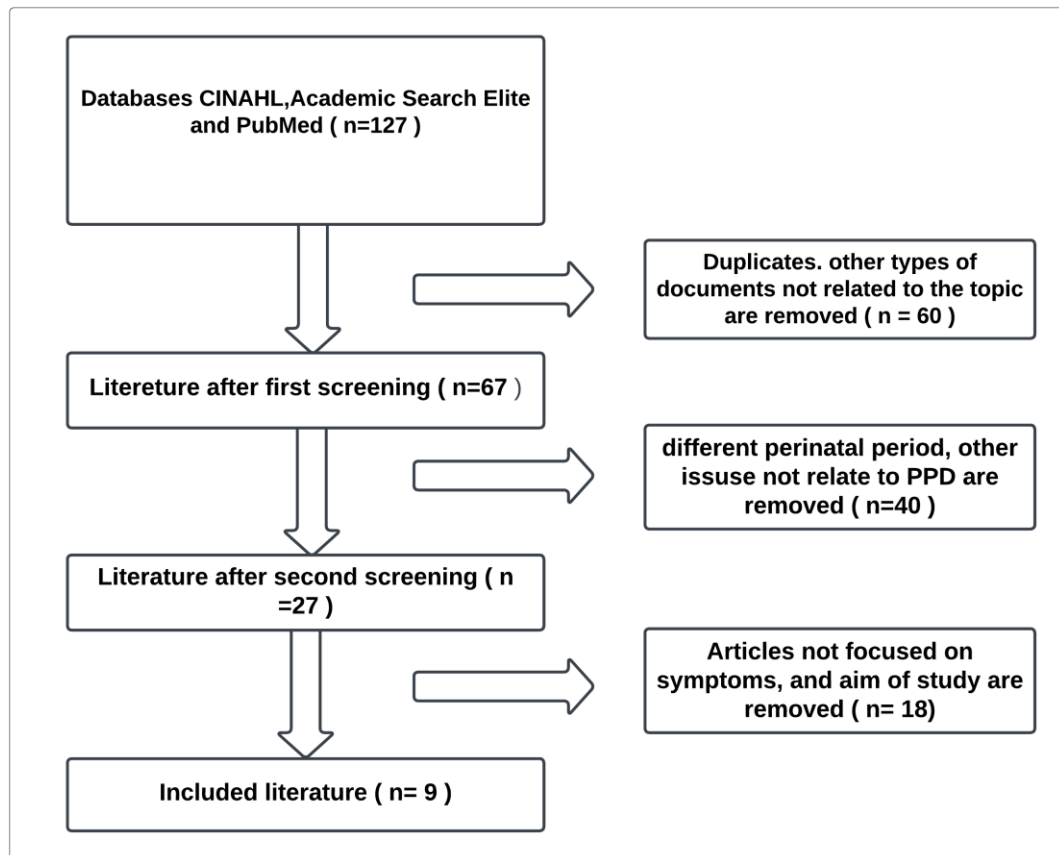


Figure 1. Literature selection process

5.3 Data analysis

After completing a literature search based on inclusion criteria nine articles from different parts of the world were selected for further study. The data from the selected literature were analyzed using the content analysis technique. The content analysis consists of three steps: data reduction, clustering of the data into subcategories, and abstraction, in which subcategories with similar contents are developed and general categories are formed. Content analysis is the technique that can be used to make the appearance of certain words, themes, or ideas valuable with qualitative data. They can practically count and examine such data, meanings, and their relationship with each other based on special sets of phrases, themes, or concepts. The major benefit of using content analysis is it helps us to review numerous pieces of literature with common themes, categorizing

them into smaller groups while keeping the original research intact (Content Analysis Method and Examples | Columbia Public Health, 2023).

The selected literature reading was done in-depth as a part of data reduction. Multiple categories are formed based on findings in each literature testing the research question of this study. Each formed category combines words or a few words as analytical units. Once the reduction was made, the categorized data was compared to identify the similarities and differences as a part of the clustering phase of data analysis, and based on the output of this phase, subcategories were created with alignment to research questions. Finally, based on the contents of the subcategories from the clustering phase, the main category was made, as presented in below Table 4.

Collection of expressions	Subcategories	Main categories
Walking a fine line each day between sanity and insanity. Being in darkness every day. Just trying to survive. No way out of their PPD. Sadness. Feeling of being ignored. lack of interest in the baby. Fear. Stress Strong feelings of failure.	Emotional Issue	

<p>Helpless. Loss of their sense of self. None understanding what PPD is like. Nervous. Wreck. Insecure. Worthless as a mother and a partner. Lowest point in their life. scared</p> <p>Experiences of emotional problems Guilt. Worries. Loneliness. Uncertainty. Difficulty in mother infant bonding Unfulfilled expectations. Emotional feelings. Redefine identity. Emotional and behavioral disturbance. Being under stress. Anxiety. Inadequate self-adaptation. Inappropriate self-control.</p>	<p>Emotional Distress</p>	<p>Emotional symptoms</p>
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Difficulty concentrating. Physical exhaustion. Tiredness. Reduced appetite. Lack of sexual desire Retain body weight	Physical Ex- haustion	Physical symptoms
Sleep disturbances. Interrupted sleep.	Sleep Issue	
Decreases in memory.	Memory Issue	
Lack of confidence to be alone with the child. Inability to take care of their children	Detach Issue	Behavioral symptoms
Changing lifestyle. Adaption to new lifestyle	Changing Life- style	
Isolation and loneliness. Loneliness. Isolation. Seclusion.	Isolation Issue	Social symptoms
Spouse relationship problems. Struggling with life related to the part- ner	Relation prob- lems	Relationship symptoms

Table 4. Data analysis process

6. Result

After the data analysis of all selected literature, five main categories were identified as below table 5.

S. N	Symptoms of PPD
1	Emotional symptoms
2	Physical symptoms
3	Behavioral symptoms
4	Social symptoms
5	Relationship symptoms

Table 5. Categories of symptoms of PPD

6.1 Emotional symptoms

People fighting the PPD issue described it to be like walking the fine line between sanity and insanity. The worse their depression gets, the thinner the line becomes. They often experienced a restraint of endless black gloom because of this internal war, and life was turned into a battle to survive. Additionally, feeling helpless like no one is there to offer help and save them. Mothers with PPD reported feeling like nervous wrecks, overcome by anxiety, insecurity, and worthlessness, especially as moms and partners. These emotions increased their suffering and led them to feel to be at the lowest point in their lives (Beck, 2020).

Among various emotional challenges a major concern was identified as the difficulty in mother-infant bonding (Highet et al., 2011), along with worry, poor self-adaptation, and anxiety (Cavalcanti et al., 2014). Mothers experiencing PPD, even mild anxiety symptoms have been shown to worsen confusion and bewilderment may develop (Grussu & Quatraro, 2013). It was found that emotional problems are the common theme during the whole postpartum phase (Johansson et al., 2020); it happened as depressive symptoms in the form of sadness, being neglected, and a lack of interest in the baby (Nguyen et al., 2023). Anxiety, fear, and stress also were the pervasive emotional experiences of the individuals during PPD (Goyal et al., 2022) and caused emotional and behavioral abnormalities, particularly in the individuals who had greater anxiety levels (Nguyen et al., 2022).

6.2 Physical symptoms

During analysis of literature several significant findings were identified that relate to the physical symptoms associated with PPD. Firstly, individuals experiencing PPD have difficulty in concentrating was a pervasive problem. This difficulty in maintaining focus had a major negative influence on their cognitive abilities and ability to perform daily chores efficiently, and the individual knew they could not think clearly as they used to before PPD (Beck, 2020). Generally, one-third of PPD mothers experience physical exhaustion, sleep disturbance, backaches, retained body weight, memory loss, and lack of sexual desire (Cheng et al., 2013). Likewise, individuals with PPD typically experienced fatigue, loss of appetite and sleep disturbance (Nguyen et al., 2023).

6.3 Behavioral symptoms

Several notable findings emerged from the studies we examined about behavioral symptoms related with PPD. Individual experiencing the PPD are showing frequent changes in their daily schedules, hobbies, and general lifestyle habits resulting reduction in social interaction, neglect of selfcare routine or avoidance of previously enjoyed activities. Likewise, the inability to give the newborn adequate care was identified as a strong behavioral expression of PPD. Many patients with PPD fail to adequately meet the needs of the newborn, which is often due to the inability to feed, bath, and provide emotional support. The behavioral symptoms revealed through the results illustrate the great impact that PPD has on an individual's capacity to complete daily activities (Nguyen et al., 2022).

6.4 Social symptoms

Significant findings were identified from the reviewed literature in this investigation of social symptoms related to PPD. Isolation and loneliness were frequently reported experiences among individuals with PPD (Beck, 2020). Many new mothers with PPD describe how they felt isolated socially and disconnected from others, which made them feel even more alone and exacerbated their emotional distress. As a result, loneliness emerged as a prevalent social symptom (Johansson et al., 2020). However, in addition to these social signs of PPD, there is another prevalent feature: isolation and seclusion. People are mainly inclined to seek social isolation and remoteness and decide not to be

in groups or socialize. Because of this, PPD patients experience more severe feelings of loneliness and isolation (Nguyen et al.,2023).

6.5 Relationship symptoms

Significant findings were noted from the literature reviewed in this study related to the relationship symptoms linked to PPD. Issues with spouse relationships are identified as a notable manifestation of PPD. Individuals suffering from PPD frequently face challenges in their relationship with their partner, which include conflicts, disagreements, communication difficulties, feelings of separation, and disconnection. These interpersonal issues frequently increased the emotional strain that new mothers felt throughout the PPD phase and feelings of stress and dissatisfaction (Johansson et al., 2020).

7. Discussion

After reviewing selected literature, the identified symptoms that are linked to the symptoms of PPD as emotional, physical, behavioral, social, and relationship symptoms. Examining these symptoms from the selected literature review provides valuable insightful information about the challenges faced by individuals during the PPD and understanding these symptoms are very crucial to create efficient support and intervention plans to address the diverse needs of individuals suffering from PPD.

The emotional symptoms of PPD present a poignant picture of individuals battling deep inner conflict like feeling of helplessness, isolation, and sense of being misunderstood and loneliness. These emotional challenges directly affect a person's overall health and capacity to perform their daily chores (Beck, 2020). Likewise, other emotional symptoms linked to PPD are bonding with newborn, anxiety, fear, and stress. These findings highlight the critical need for comprehensive support to address the emotional complexity of PPD and give a place to go for guidance and help like providing educational materials can help to identify mood disorder sign and symptoms to seek early treatment (Beck, 2020) and also non-pharmacological treatment like support from family, doctors, friends, and counsellors are also very effective and suitable (Highet et al., 2011).

Physical symptoms linked with PPD are tiredness, difficulties focusing, sleep disorders, weight gain, back pain, reduced appetite, decrease in memory, and low sexual desire in addition to impairing cognitive performance and lethargy. Recognizing and addressing these physical symptoms are essentials to reduce the overall impact of PPD on new mothers functioning and wellbeing holistic interventions solutions must recognize and treat these physical symptoms, like active assessment like monitor and control weight gain during pregnancy, body mechanics when lifting baby or positioning infant feeding likewise it is important to assessment for depressive symptoms from early to late postpartum (Cheng et al., 2013).

Behavioral symptoms, like lifestyle changes, challenges in caring of newborn highlights the pervasive nature of PPD's impacts on day-to-day functioning like struggle to maintain daily routines, self-care or fulfill their parental duties resulting feelings of inadequacy and sadness. Addressing these behavioral symptoms required targeted therapies that assist people in adaption to their new duties and responsibilities while managing

the difficulties presented by PPD. The early detection of PPD and long-term follow-up play essential role in effective treatment of this common mood disorder (Nguyen et al., 2022) as well as providing educational materials can help to identify mood disorder sign and symptoms to seek early treatment (Beck, 2020).

Social symptoms like loneliness and isolation highlight how deeply PPD affects the individual's social life and well beings. Staying away from social interaction/connections and feeling disconnected increases emotional distress and slows the recovery process. Social symptoms can be mitigated by creating therapies that encourage social life and social connections which makes significant impact on reducing the negative social impacts to individuals on PPD phase (Johansson et al., 2020).

A new mother with PPD is further complicated by challenges in spousal relationships like communication difficulties, disagreements, and a sense of separation can increase the symptoms and make recovery more difficult. Relationship problems must be addressed, and the couples undergoing PPD must take the support from health professionals to speed up the recovery. Health professionals as they help families adjust to parenthood needs to include both couples, not at individual level, which will help reduce relationship symptoms (Johansson et al., 2020).

Furthermore, the symptoms recognized in this study is mostly based on the experience of healthcare professionals and new mothers. Whereas detection PPD symptoms and assessment of realistic needs of women can vary considerably based on cultural beliefs and values of the women as it highly impacts the way they approach to the healthcare and the treatment they will receive (Evagorou et al., 2015).

Acknowledging and understanding the emotional, physical, behavioral, social, and relationship symptoms of PPD, healthcare practitioners can enhance their ability to assist individuals and their families through this difficult time and foster recovery and overall well-being. Comprehensive assessment tools, tailored interventions addressing emotional, physical, behavioral, social, and relationship symptoms, a multidisciplinary approach involving healthcare professionals, early detection and intervention, supportive services, couples therapy, ongoing research to assess treatment effectiveness are all important considerations for future treatment. Incorporating these methods can improve treatment outcomes and help new mothers with symptoms of PPD.

7.1 Ethical Consideration, validity and reliability, strenght and Limitation

Research involves several ethical considerations most be prioritized like informed consent of participants especially vulnerable group of participants. To enable participants to make voluntary and knowledgeable decisions about their participation, researchers must make clear and understandable communication about the study, its goals, potential risks, and benefits. Likewise maintaining the confidentiality and anonymity is essential to protect participants' privacy and prevent any potential harm or stigma associated with PPD researcher should carefully handle and store data to protect participants identity and sensitive information as well as its especially important to researcher to understand legal and ethical issues are important to both subject and researcher (Yip et al., 2016).

Authors of the literatures chosen for this study which requires the ethical committee approval have stated the approval of research permission from various ethical committee and for those which do not require ethical committee approval ensured that no physical or psychological harm was caused to the participants during those studies. In all reviewed literature in this study authors assured that inform consent of all participants all participants were taken, and the confidentiality was maintained during the data collection process. In summary, the literature examined in this study acknowledged the ethical aspects of their research and emphasized obtaining approval from various ethical committees.

The critical appraisal review of selected literature (Appendix II) was done using the quality assessment tool developed by (Hawker et al., 2002). The scoring system consists of a total score of 36 indicating the best quality which is calculated based on nine distinct categories as title, abstract, introduction, aims, method, data analysis, ethical consideration, result transferability and usefulness. The scoring criteria as good (4), fair (3), poor (2), and very poor (1) the lower the total score the poorer the quality of literature (Hawker et al., 2002).

Reliability means something that can be measured, and reproducible. It ensures that equivalent results are consistently obtained when tested repeatedly. Greater reliability indicates that research findings can be replicated by other researchers under comparable conditions. Validity on the other hand assures that the results achieved during the study by following the scientific research methodology addresses the research question

(Aityan, 2022). The study is conducted following standard research methodology, literature search was done within well-known scientific databases, evident based studies, literature was selected based on defined inclusion criteria to addresses research questions and then critical analysis was conducted. Overall research was conducted following standard process and supervision under the guidance of supervisor.

The limitation of this study is the articles are chosen between 2011 to 2023 and it did not hold the knowledge of similar studies before 2011. Likewise, we during the study the literature selected is conducted on different geographical region and the selected literature was only in English language which is missing the data from literature conducted in other languages. Even though this study covers literatures conducted in the different geographical location but do not discuss about the detection of PPD symptoms based on cultural belief and values of those geographical locations as cultural belief and postnatal practices around the world is completely different because all cultures have their own way of practicing postnatal period (Evagorou et al., 2015). This study provides insights about the symptoms of PPD on new mothers which can be helpful in knowing PPD symptoms, provide support and interventions to the new mothers in postpartum phase.

8 Conclusion

In this study, critical review of nine studies was done which was published in various scientific journals and based on different countries, including the USA (Beck, 2020), Australia (Highet, et al., 2011), Brazil (Cavalcanti, et al., 2014), Italy (Grussu & Quatraro, 2013), Sweden (Johan Nguyen, T.T. et al., 2022). After a deep study of selected articles, the symptoms of postpartum depression in new mothers during the postpartum phase are emotional, physical symptoms, behavioral symptoms, social symptoms, and relationship symptoms.

Nursing interventions should be employed regarding revealed indications that need to be amended to help the individual and the family. Emotional support is sometimes therapeutic and may help people experiencing emotional symptoms. In contrast, physical support like medicine and physical therapy can physically assist those who experience physical symptoms. Couples counseling is another instrument used to help resolve various relationship problems. By identifying and managing the specific features of postpartum depression, nurses, midwives, or other medical professionals will be in a position to provide families and individuals with care and support. These interventions help facilitate recovery and the families' and individuals' overall welfare.

Furthermore, this study will help to understand PPD symptoms in more depth as well as will help future researchers to study PPD symptoms in new mothers as authors believes yet more studies and research are needed to understand the early detection of PPD symptoms and developed the nursing interventions accordingly.

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Appendix I : Reviewed Articles

Author/Year	Title	Aim	Methodology	Findings
(Beck, 2020)	Postpartum Depression: A Metaphorical Analysis	To examine the language women used to describe their experiences of postpartum depression with metaphors that can provide a valuable source of insight for psychiatric nurses and other clinicians.	Secondary qualitative data analysis.	Eleven metaphors were identified that women used to help explain their postpartum depression: being hit by a ton of bricks, being a tightrope walker, living in a nightmare, feeling trapped, being in the middle of the sea, feeling like an alien, being a loner, being a basket case, having cobwebs in the brain, feeling like garbage, and hitting rock bottom.
(Nguyen et al., 2023)	Postpartum depression in Vietnam: a scoping review of symptoms, consequences, and management	analyze and synthesize the findings of studies on PPD examining the symptoms, consequences, and management strategies	Literature review	sadness, tiredness, the feeling of being ignored, lack of interest in the baby, reduced appetite, and sleep disturbance

		among Vietnamese women		
(Highet et al., 2011)	Depression in the perinatal period: awareness, attitudes and knowledge in the Australian population	To establish a benchmark of awareness, knowledge and attitudes in Australia in relation to depression and its treatment in the perinatal period, and to identify demographic factors associated with perinatal mental health literacy	A cross-sectional telephone survey	Awareness of postnatal depression appeared to be at a high level in the community, but both anxiety and antenatal depression were comparatively under-recognized, suggesting there is considerable scope for awareness-raising
(Cavalcanti et al., 2014)	Ineffective role performance” nursing diagnosis in postpartum women: a descriptive study	To investigate the “ineffective role performance” nursing diagnosis in postpartum women at family health centers	Descriptive study	PDSS allowed the determination of a human response in the postpartum period, so it is an important instrument to be introduced in the professional activities associated with the Family Health Strategy program

(Grussu & Quatraro, 2013)	Maternity Blues in Italian Primipara Women: Symptoms and Mood States in the First Fifteen Days After Childbirth	Test the hypothesis that somatic symptomatology is major in the initial days after the birth of the child. The second is to verify that psychological symptomatology and mood disturbance may be major in the 3 to 8 days after delivery. The third is to test the hypothesis that high levels of somatic and psychological symptoms may be associated with high mood disturbances and vice versa	Qualitative Study	the mothers studied showed both psychological symptoms and mood disturbances of slight entity. Conversely, somatic symptoms were particularly acute in the first few days after childbirth.
(C. Y. Cheng et al., 2013)	Physical Conditions and Depressive Symptoms of Chinese Postpartum Mothers in the United States and Taiwan	to determine commonalities and differences in physical conditions and depressive symptoms of Chinese postpartum mothers in the	Cross-sectional correlational design	More Taiwanese mothers experienced depression. Depression scores were correlated with physical conditions. Over 50% of mothers with

		United States and Taiwan, and whether their relationship differs by country		depression experienced physical exhaustion, sleep disturbances, interrupted sleep, and decreases in memory
(Johansson et al., 2020)	Mothers' and fathers' lived experiences of postpartum depression and parental stress after childbirth: a qualitative study	The study aims are to explore the lived experiences of mothers and fathers of postpartum depression and parental stress after childbirth.	Qualitative Interviews.	significant impact of postpartum depression and parental stress has in parents' everyday lives and on the spouse relationship.
(Goyal et al., 2022)	Postpartum Depressive Symptoms and Experiences During COVID-19	To identify postpartum depression risk and describe experiences of women in the first 6 weeks after giving birth during the COVID-19 pandemic.	Qualitative Study	Quantitative and qualitative findings provided a holistic view of women's depressive symptoms and experiences at home with their infants during the COVID-19 pandemic.
(H. T. T. Nguyen et al., 2022)	The symptoms of postpartum depression observed by family members: A pilot study	The symptoms of postpartum depression observed by family members: A pilot study	Cross-sectional study	Fifty-six new mothers participated in the screening with EPDS, and 20 (35.7%) of them

				were detected to be at risk of PPD (with an EPDS score of 12 and above)
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Appendix II : Critical Appraisal of the articles (Hawker et al. 2002)

Author	Ab- stra ct/ti- tle	Intro- duction and aims	Meth- ods and data	Sam- pling	Data anal- ysis	Eth- ics and bias	Re- sult s	Trans- ferabil- ity/gen- eraliza- bility	Impli- cations and use fulness	To- tal
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Beck, 2020)	4	3	4	4	4	4	4	4	4	35
(Highet et al., 2011)	4	2	4	4	4	2	4	4	4	32
Caval- canti et al., 2014)	4	4	4	4	4	4	4	4	4	36
(Grussu & Quatrar o, 2013)	2	3	3	4	3	3	4	4	4	30
Johans- son et al., 2020	4	4	4	4	4	4	4	4	4	36
C. Y. Cheng et al., 2013)	2	4	3	4	4	2	4	4	4	31
(Nguye n et al., 2023)	4	3	4	4	4	2	4	4	3	32
Goyal et al., 2022)	4	3	4	4	4	2	4	4	3	32
(H. T. T. Nguyen	2	2	4	4	3	4	4	3	4	30

et al., 2022)										
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