

**A Survey on Prevalence, Complication & Treatment of Postpartum
Depression at Ishwardi Health Complex, Pabna**



Daffodil
International
University

*[In the partial fulfillment of the requirements for the degree of Masters of
Pharmacy]*

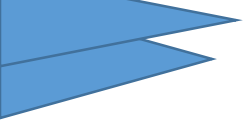
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APPROVAL

This thesis paper, “**A Survey on Prevalence, Complication & Treatment of Postpartum Depression at Ishwardi Health Complex, Pabna**”, submitted to the Department of Pharmacy, Faculty of Health & Life Sciences, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Masters of Pharmacy and approved as to its style and contents.

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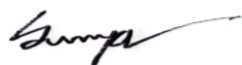
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DECLARATION

I hereby declare that this thesis report, “**A Survey on Prevalence, Complication & Treatment of Postpartum Depression at Ishwardi Health Complex, Pabna**”, is done by me under the supervision Dr. Md. Sarowar Hossain Associate Dean & Associate Professor, Department of Pharmacy Faculty of Health & Life Sciences Daffodil International University. I am declaring that this thesis is my original work. I also declare that neither this thesis nor any part therefore has been submitted elsewhere for the award of Master’s degree.

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Certificate

This is to certify that the results of the investigation that are embodied in this thesis works are original and have not been submitted before in substance for any degree or diploma of this university. The entire present work submitted as a thesis work for the partial fulfillment of the degree of Masters of Pharmacy.

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My Parents,

The persons who always encourage me in every sphere of my life.

My teacher,

***The persons who guided me in this process and the faculties who kept me
on track.***

Abstract

Background: Postpartum depression (PPD) is a significant public health issue affecting mothers globally, impacting maternal and child health. Understanding the prevalence, complications, and treatment approaches is essential for developing effective interventions.

Objective: This study aims to investigate the prevalence of postpartum depression, associated complications, and the treatment modalities available and utilized by mothers at Ishwardi Health Complex in Pabna.

Methods: A cross-sectional survey was conducted among postpartum women attending the Ishwardi Health Complex, Pabna. Data were collected using structured questionnaires assessing demographic variables.

Results: Among the participants 60% of respondents stated that they were quite knowledgeable about postpartum depression. This poll revealed that 40% of respondents said they had been impacted by postpartum depression, whereas the majority of respondents (60%) said they had not been affected. In this investigation, majority of the responders 40% replied that they have been felt their symptoms is less than 2 weeks. 26% of respondents described experiencing crying too much. Furthermore, 15% of participants indicated suffering from depressed mood or severe mood swings, while 21% stated they had experienced Difficulty bonding with your baby. In this survey, 35% participants retorted that prolonged depression is the most common complication associated with untreated PPD. Among the all participants 40% replied that delay in diagnosis is the key factor that contribute to complications in PPD. Moreover, 25. 45% responders replied that doctor has been suggested Medication (antidepressants) for managing PPD. Conferring to this education, the majority of participants (89%) indicated that they were highly content with the existing treatment procedures for postpartum depression.

Conclusion: There is a critical need for improved screening, increased awareness, and accessible treatment options to address this public health concern effectively.

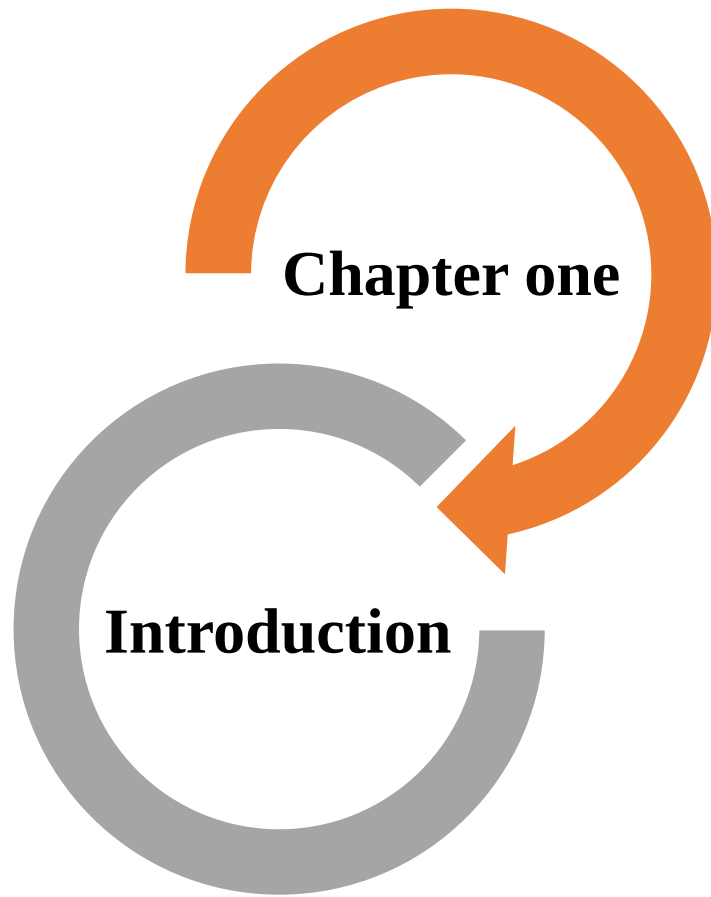
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1. Introduction

Postpartum depression (PPD) is a significant public health concern affecting women globally, with considerable implications for maternal and child health. It is characterized by emotional disturbances that can range from mild to severe, typically occurring within the first few weeks to months after childbirth. Despite its prevalence, PPD often goes undiagnosed and untreated, especially in low-resource settings [1]. Understanding the prevalence, complications, and treatment modalities for PPD is crucial for developing effective interventions and support systems for affected women. The Ishwardi Health Complex, located in Pabna, Bangladesh, serves as a primary healthcare facility for a large population of women, many of whom are in their reproductive years. This setting provides a unique opportunity to study PPD within a specific cultural and socioeconomic context [2]. The healthcare system in Bangladesh, particularly in rural areas, faces numerous challenges, including limited access to mental health services, stigma associated with mental illness, and a lack of awareness about PPD among healthcare providers and the general population. This survey aims to address these gaps by providing comprehensive data on the prevalence of PPD among women attending the Ishwardi Health Complex. It also seeks to explore the associated complications, both physical and psychological, that these women experience [3]. Furthermore, the survey examines the current treatment practices for PPD in this setting, highlighting the availability and effectiveness of various interventions. By conducting this survey, we hope to shed light on the critical issue of postpartum depression in Ishwardi, Pabna, and provide evidence-based recommendations for improving maternal mental health services in similar resource-limited settings. The findings of this survey will be instrumental in guiding policymakers, healthcare providers, and community stakeholders in developing targeted strategies to support women suffering from PPD and enhance their overall well-being [4].

1.1 Etiology of Postpartum depression (PPD)

Postpartum depression (PPD) is a complex and multifactorial mental health condition that affects women after childbirth. The etiology of PPD involves a combination of biological, psychological, and social factors. Here are the key components contributing to the development of PPD:

Biological Factors

Hormonal Changes: Significant fluctuations in hormones such as estrogen and progesterone after childbirth can influence mood and emotional stability.

Genetic Predisposition: A family history of depression or other mood disorders can increase the risk of PPD.

Neurotransmitter Imbalances: Changes in brain chemistry, including alterations in neurotransmitters like serotonin and dopamine, may play a role [5].

Psychological Factors

Previous Mental Health Issues: A history of depression, anxiety, or other mental health conditions can predispose women to PPD.

Stress and Coping Mechanisms: High levels of stress and poor coping skills can contribute to the development of PPD.

Unrealistic Expectations: Unrealistic expectations about motherhood and the pressure to be a perfect parent can lead to feelings of inadequacy and depression [6].

Social Factors

Lack of Support: Insufficient emotional, social, or practical support from partners, family, and friends can increase the risk of PPD.

Life Stressors: Stressful life events such as financial difficulties, relationship problems, or the loss of a loved one can contribute to the onset of PPD.

Isolation: Feeling isolated or disconnected from social networks can exacerbate feelings of loneliness and depression [7].

Other Contributing Factors

Birth Experience: Complications during childbirth, a traumatic birth experience, or dissatisfaction with the birth process can increase the likelihood of PPD.

Infant Health: Having a baby with health issues or special needs can be a significant stressor for new mothers.

Breastfeeding Difficulties: Challenges with breastfeeding can contribute to feelings of frustration and inadequacy, potentially leading to PPD [8].

The etiology of postpartum depression is multifaceted, involving an interplay of biological, psychological, and social factors. Recognizing and addressing these factors is crucial for the effective prevention, early detection, and treatment of PPD. Early intervention and support can significantly improve outcomes for affected women and their families [9].

1.2 Pathogenesis of depression

The pathophysiology of major depressive disorder (MDD) remains elusive due to its clinical and etiological diversity. This review examines the most empirically supported and clinically relevant neurobiological theories of MDD, highlighting their respective strengths and limitations. These theories encompass research on psychosocial stress, stress hormones, neurotransmitters such as serotonin, norepinephrine, dopamine, glutamate, and GABA, as well as neurocircuitry, neurotrophic factors, and circadian rhythms [10]. Given that each theory pertains to only certain subsets of depressed patients and that depressive pathophysiology can significantly change over the course of the illness, current evidence does not support a unified hypothesis of depression. Consequently, antidepressant treatments, including both psychological and biological interventions, should be personalized for each patient and their specific disease state. The relevance of these individual neurobiological theories to clinicians in everyday practice and to clinical researchers developing new therapies is also discussed [11].

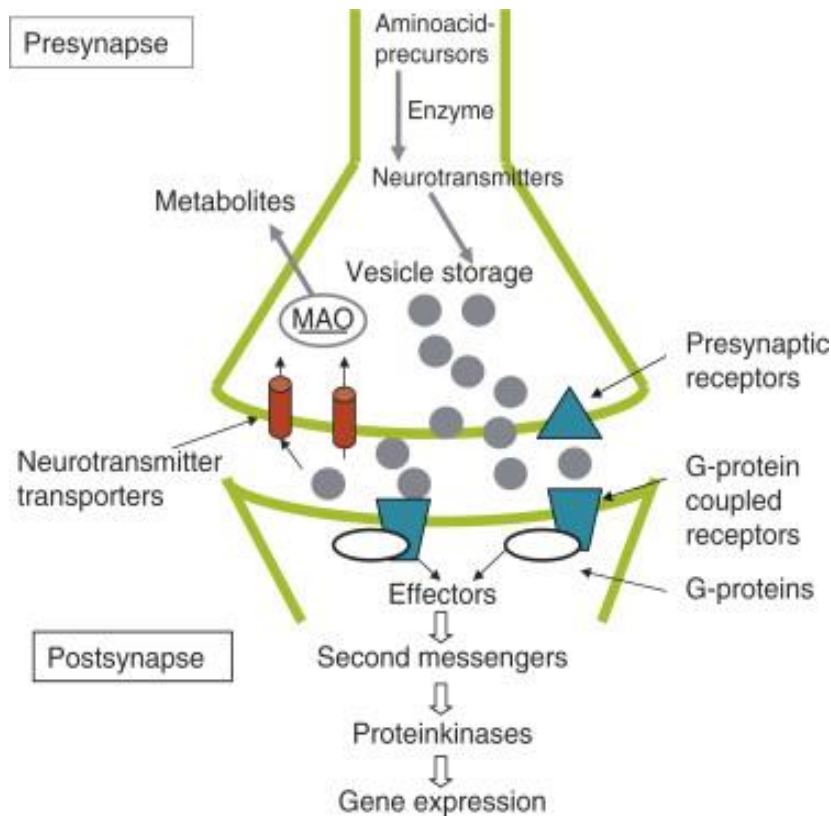


Figure 1: Pathophysiology of depression

1.3 Screening and Diagnosis

The optimal approach to detecting postpartum depression is still debated. Conducting sensitive clinical inquiries about mood during postpartum visits helps in identifying cases. Both the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics recommend using the 10-item Edinburgh Postnatal Depression Scale (EPDS) for identifying possible postpartum depression [12]. The U.S. Agency for Healthcare Research and Quality advises starting with a sensitive two-question screening tool about feelings of depression or lack of interest, followed by a more specific instrument for those who respond positively, to minimize false positives and negatives. The United Kingdom's National Institute for Health and Care Excellence also endorses asking all postpartum women these two questions, which have shown high sensitivity (0.95; 95% CI, 0.88 to 0.99) and moderate specificity (0.65; 95% CI, 0.56 to 0.74) in various scenarios. Few women who respond negatively to both questions are likely to be depressed [13]. A positive response should be followed by either the EPDS or the Patient Health Questionnaire 9 (PHQ-9). Positive results from screening should lead to a thorough clinical interview to

confirm the diagnosis. Evaluating women for potential postpartum depression involves thorough history taking to confirm the diagnosis, identify any coexisting psychiatric disorders, and address contributing medical and psychosocial factors. Around 70% of new mothers experience mild depressive symptoms known as “baby blues,” which peak between 2 and 5 days postpartum and generally include weepiness, sadness, mood swings, irritability, and anxiety [14]. These symptoms typically do not significantly impair functioning or include psychotic features and usually resolve on their own within two weeks, although some cases may develop into postpartum depression. Distinguishing between postpartum blues and postpartum depression can be challenging, but assessing mood and symptom severity at different time points may help. During history taking, special attention should be paid to personal or family history of depression, postpartum psychosis, or bipolar disorder, particularly if these conditions were associated with pregnancy [15]. Since depression can be a symptom of bipolar disorder, all depressed women should be asked if they have ever experienced four or more consecutive days of unusually high, expansive, or irritable mood and increased activity or energy that was different from their normal behavior, noticed by others, or led to problematic situations. Positive responses necessitate further evaluation as treating bipolar disorder with antidepressants alone can be harmful. Additionally, coexisting anxiety and obsessive-compulsive symptoms are common in women with postpartum depression and should be further examined by healthcare providers [16].

1.4 Prevention of Postpartum depression (PPD)

Women who experience untreated depression during pregnancy face a risk of developing postpartum depression that is over seven times higher than that of women without depression symptoms during pregnancy. Therefore, addressing antenatal depression is essential for preventing postpartum depression. In a small observational study involving 78 women diagnosed with depression in their first trimester, none of those who received treatment through psychotherapy or pharmacotherapy developed postpartum depression, whereas 92% of those who did not receive treatment did [17]. Additionally, a pooled analysis of 20 randomized trials found that supportive and psychological care (such as home visits, telephone-based peer support, or interpersonal therapy) reduced the risk of postpartum depression among women with subthreshold depression symptoms or

significant risk factors compared to standard care (pooled rates of postpartum depression: 13.8% vs. 16.6%; pooled risk ratio: 0.78; 95% CI: 0.66 to 0.93). These interventions are more effective when provided after childbirth (pooled risk ratio from 12 trials: 0.73; 95% CI: 0.59 to 0.90) than during pregnancy (pooled risk ratio from 10 trials: 0.96; 95% CI: 0.75 to 1.22). Healthy nutrition, regular exercise, and sufficient sleep are also recommended, although the evidence supporting their effectiveness in reducing the risk of postpartum depression is limited [18].

Chapter 2

Literature Review

2.1 Literature Review

Analysis 1:

Postpartum depression (PPD) affects up to 15% of mothers. Recent studies have pinpointed various psychosocial and biological risk factors for PPD. Its detrimental effects on both short-term and long-term child development are well-documented. Despite this, PPD is often underdiagnosed and undertreated. Obstetricians and pediatricians play crucial roles in screening for and managing PPD. Available treatments include psychotherapy and antidepressant medication. However, barriers to following treatment recommendations include limited access to therapists and concerns from breastfeeding mothers about exposing their infants to antidepressants through breast milk. More research is needed to systematically investigate the short-term and long-term impacts of medication exposure via breast milk on infant and child development [19].

Analysis 2:

Postpartum depression (PPD) is a significant mental health issue that is widespread and poses risks to child development. Key risk factors for PPD include a history of depression, stressful life events, poor marital relationships, and inadequate social support. Efforts to identify PPD through public health initiatives have been on the rise. Standard treatments, such as Interpersonal Psychotherapy, as well as more customized approaches, have proven effective for PPD. However, prevention strategies have shown inconsistent success. Future research should focus on studying the epidemiological risk factors and prevalence of PPD, interventions targeting the parenting practices of PPD-affected mothers, specific vulnerabilities in certain subsets of PPD, trials assessing the effectiveness of psychological treatments, and prevention measures aimed at addressing mental health issues in pregnant women [20].

Analysis 3:

Postpartum depression is a disorder that frequently goes unnoticed and untreated. Various psychosocial stressors can contribute to the onset of postpartum depression, with a significant risk factor being a history of major depression, particularly for those who have experienced depression in previous pregnancies. If left untreated, maternal depression can

adversely affect child development, hinder mother-infant bonding, and increase the risk of anxiety or depressive symptoms in children later in life. Proper management of postpartum depression is essential for comprehensive medical care. Obstetricians and pediatricians play crucial roles in the screening and treatment of postpartum depression. To prevent negative outcomes associated with depression and its impact on children, it is crucial for all healthcare professionals and nurse practitioners to be knowledgeable about the specific signs and symptoms, appropriate screening methods, and effective treatments. This review article discusses the key characteristics of postpartum depression [21].

Chapter 3

Purpose of the Study

3.1 Purpose of the study

The primary purpose of this study is to investigate the prevalence, complications, and treatment modalities of postpartum depression among women attending the Ishwardi Health Complex in Pabna.

- ❖ To assess the incidence rate of postpartum depression among new mothers at Ishwardi Health Complex.
- ❖ To examine the various complications associated with postpartum depression that affect both mothers and their families.
- ❖ To investigate the current treatment practices and support systems available for postpartum depression at the Ishwardi Health Complex.

The study seeks to enhance the understanding of postpartum depression in the context of Ishwardi Health Complex and propose actionable recommendations to improve maternal mental health services in the region.

Chapter 4

Materials & Method

4. Methodology

4.1 Study Design

This cross-sectional study involving postpartum depression patients was conducted at Ishwardi Health Complex in Pabna from March to May 2024. After obtaining approval from the institution's ethical committee, all participants provided their informed consent. A custom-designed questionnaire was used to collect basic information and details from the patients about postpartum depression. Data were collected through a physical survey using survey questionnaires.

4.2 Inclusion Criteria

Participants who had patients with postpartum depression met the inclusion criteria.

4.3 Exclusion Criteria

Patients who refused to take part in the trial were not included.

Chapter 5

Results & discussion

5.1 Age of Responders

Q: Age

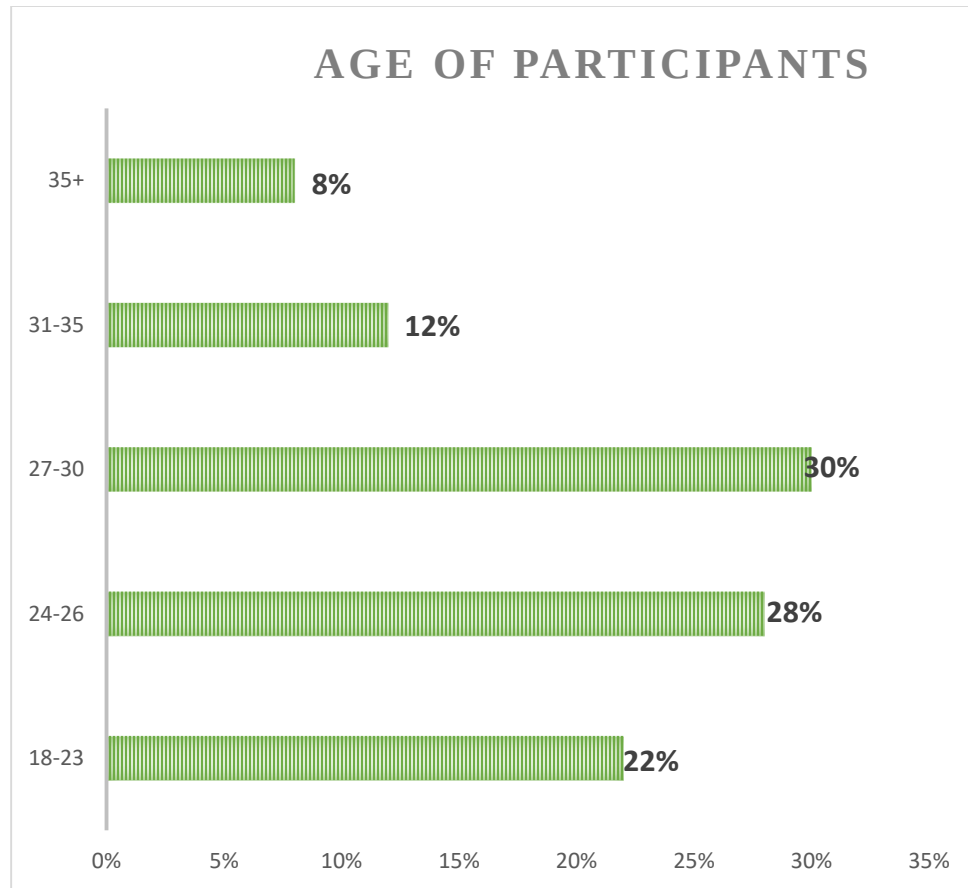


Figure 2: Age of Responders

Discussion: A total of 150 individuals took part in the study. As per this chart 30% participants are 27-30 ages, 28% responders are 24-26 ages & 22% responders are 18-23 ages.

5.2 Gender of Participants

Q: Gender

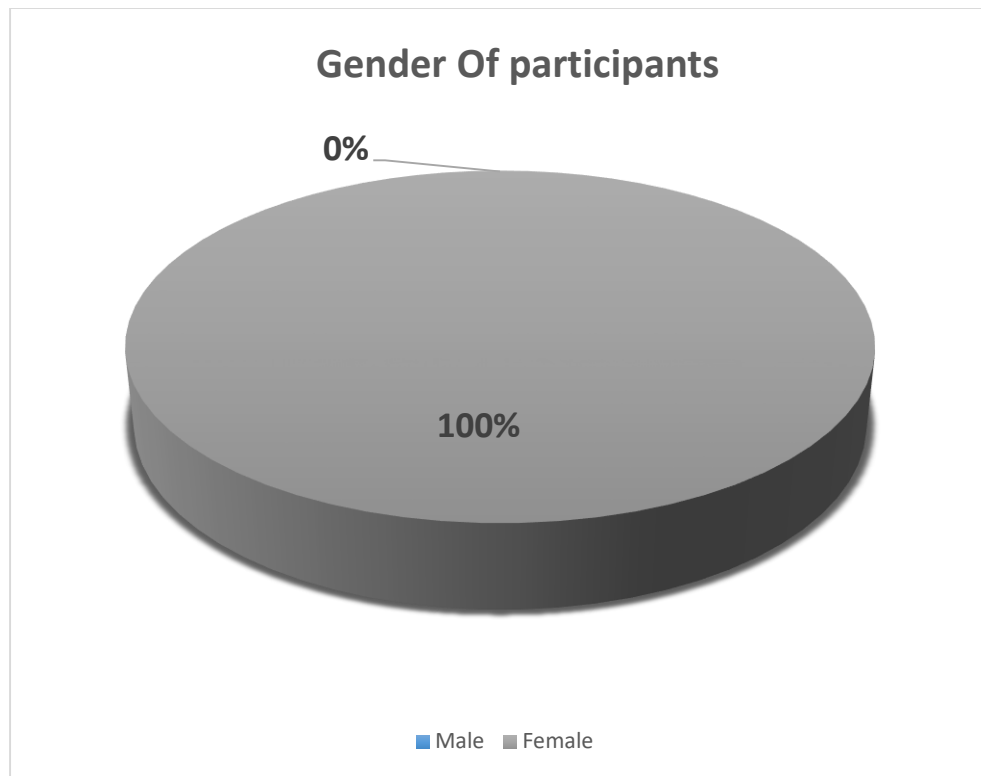


Figure 3: Gender of Participants

Discussion: Postpartum depression is a type of depression that happens after giving birth. All participants are female.

5.3 Professional Status of Responders

Q: What is your profession?

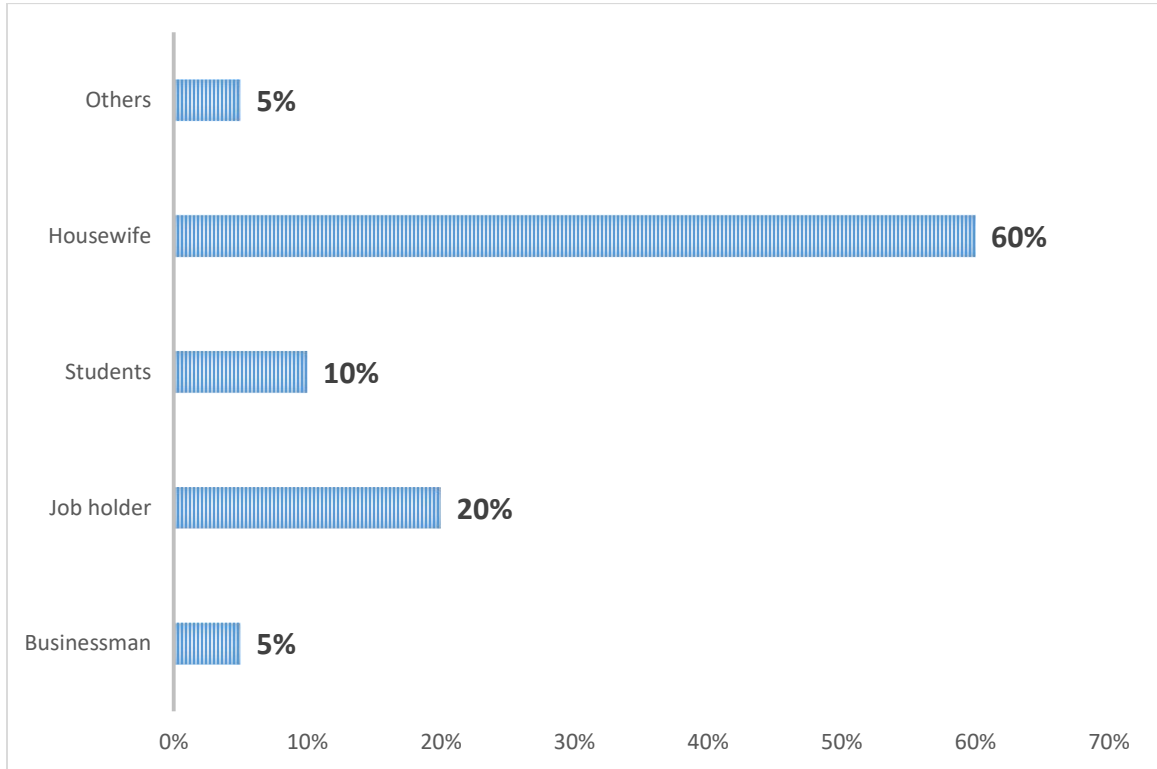


Figure 4: Professional Status of Responders

Discussion: Various professionals were selected to participate in this survey. According to Figure 5, most of the participants 60% are housewife, 20% responders are job holder.

5.4 Familiar with the postpartum depression (PPD)

Q: Are you familiar with the postpartum depression (PPD)?

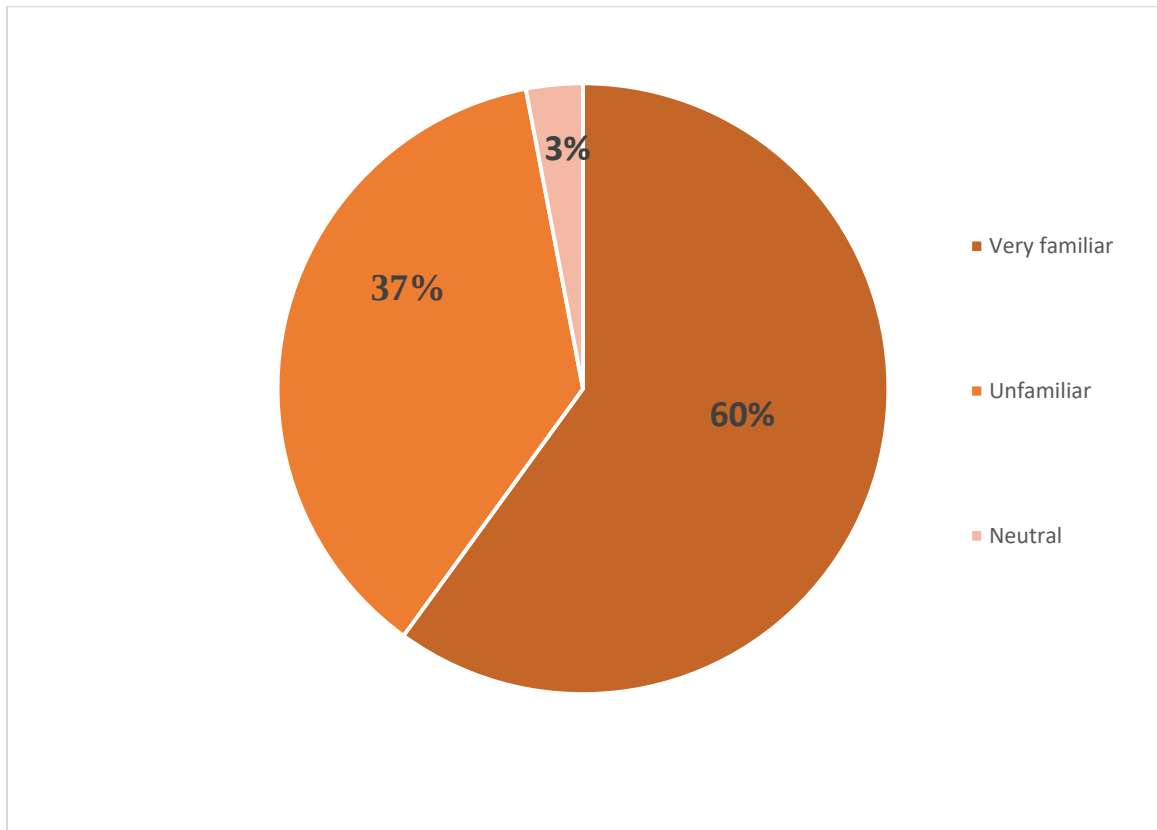


Figure 5: Familiar with the postpartum depression (PPD)

Discussion: Among the participants 60% of respondents stated that they were quite knowledgeable about postpartum depression, while 37% indicated that they lacked familiarity with the condition. Postnatal depression is a prevalent issue that affects many parents following the birth of a baby.

5.5 Affected ratio of postpartum depression (PPD)

Q: Have you ever been affected by postpartum depression (PPD)?

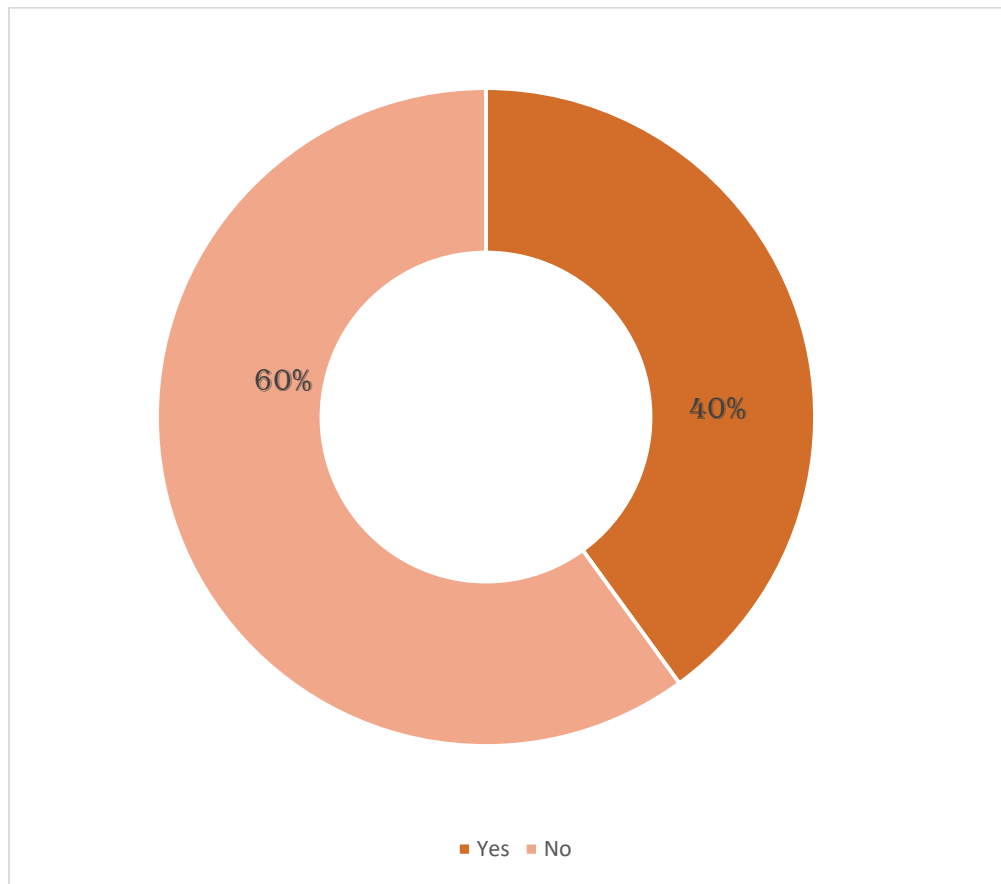


Figure 6: Affected ratio of postpartum depression (PPD)

Discussion: Postpartum depression affects about one in seven women (PPD). While PPD tends to linger longer and has a more severe impact on women's capacity to return to normal function, baby blues-affected women usually recover fast. The mother's relationship with the child is impacted by PPD. This poll revealed that 40% of respondents said they had been impacted by postpartum depression, whereas the majority of respondents (60%) said they had not been affected.

5.6 Duration of illness

Q: How long have you been diagnosed with postpartum depression?

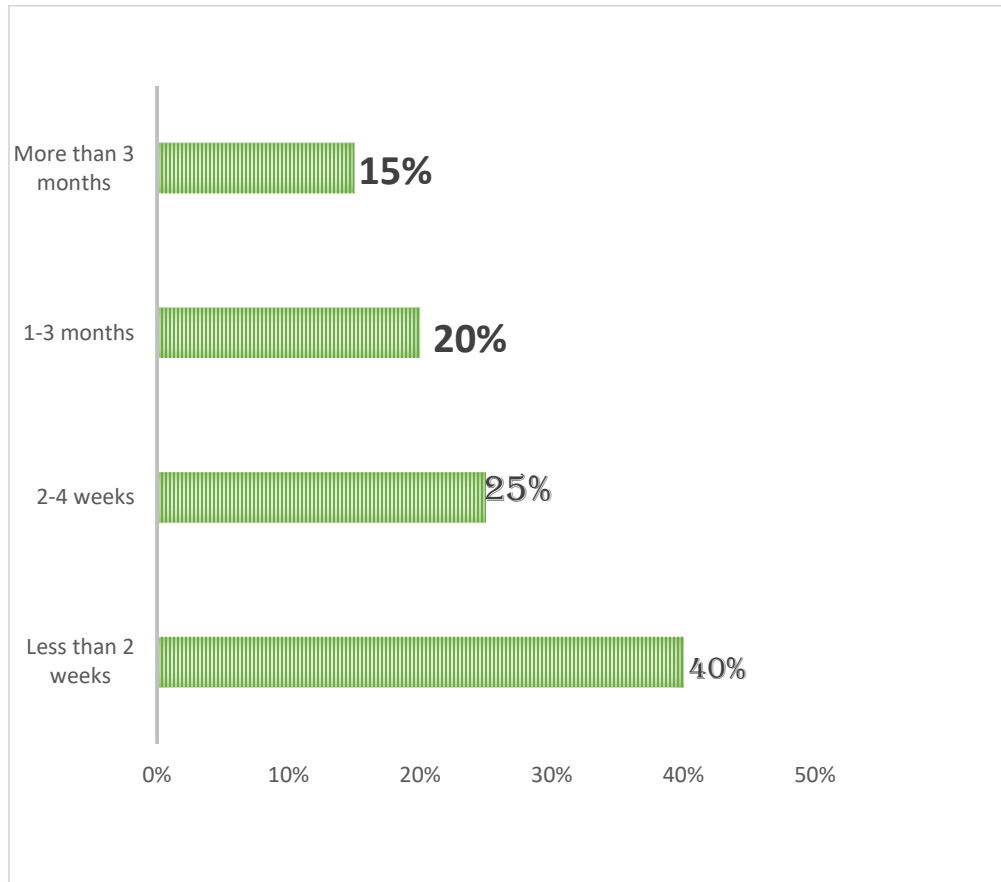


Figure 7: Duration of illness

Discussion: In this investigation, majority of the responders 40% replied that they have been felt their symptoms is less than 2 weeks. Additionally, 25% responders retorted that they have been felt their symptoms in 2-4 weeks, 20% responders felt is 1-3 months & 15% responders replied that they have been felt their symptoms is more than 3 months.

5.7 Symptoms of postpartum depression

Q: What kind of symptoms have you experienced?

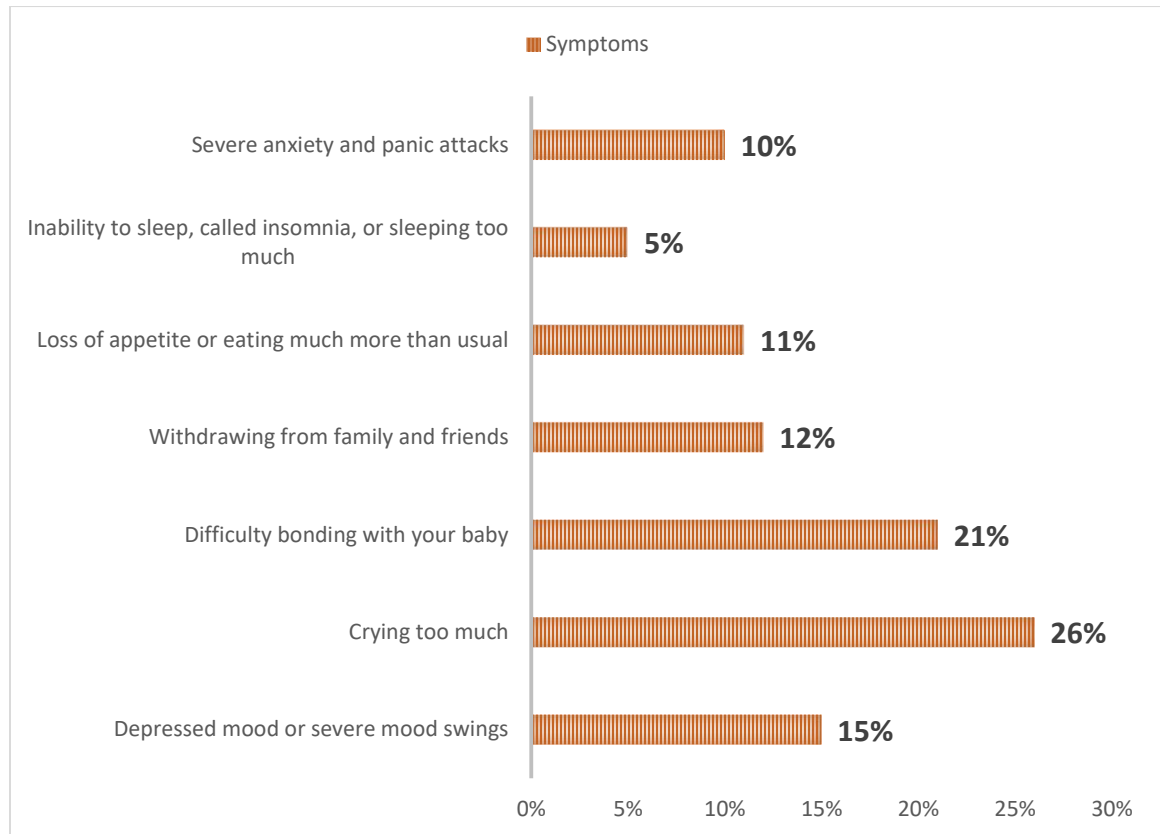


Figure 8: Symptoms of postpartum depression

Discussion: In this diagram demonstrations that 26% of respondents described experiencing crying too much. Furthermore, 15% of participants indicated suffering from depressed mood or severe mood swings, while 21% stated they had experienced Difficulty bonding with your baby. Moreover, 12% of respondents mentioned experiencing withdrawing from family and friends.

5.8 Diagnosis of PPD

Q: Which diagnostic tools recommend for diagnosing PPD?

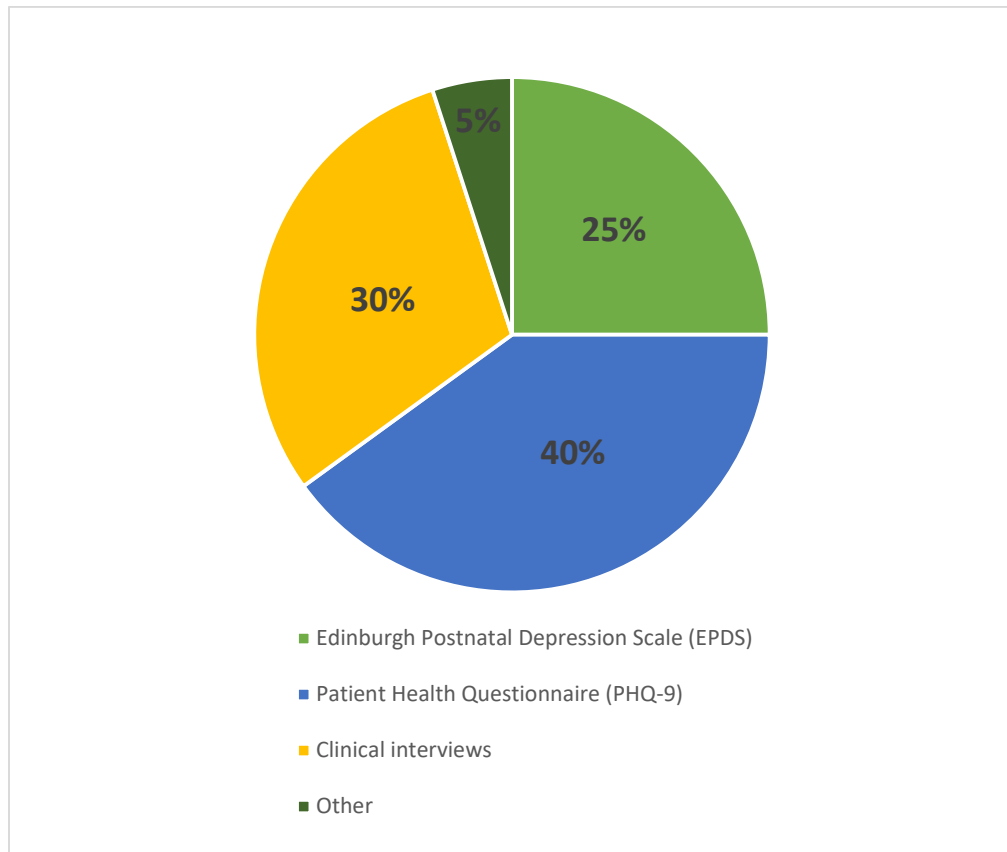


Figure 9: Diagnosis of PPD

Discussion: The majority of respondents (40%) said in the pie chart that their doctor had recommended the Patient Health Questionnaire (PHQ-9), followed by the Edinburgh Postnatal Depression Scale (EPDS) with 25% and clinical interviews with 30% for postpartum depression diagnosis.

5.9 Common complications associated with untreated PPD

Q: What are the most common complications associated with untreated PPD that you have observed?

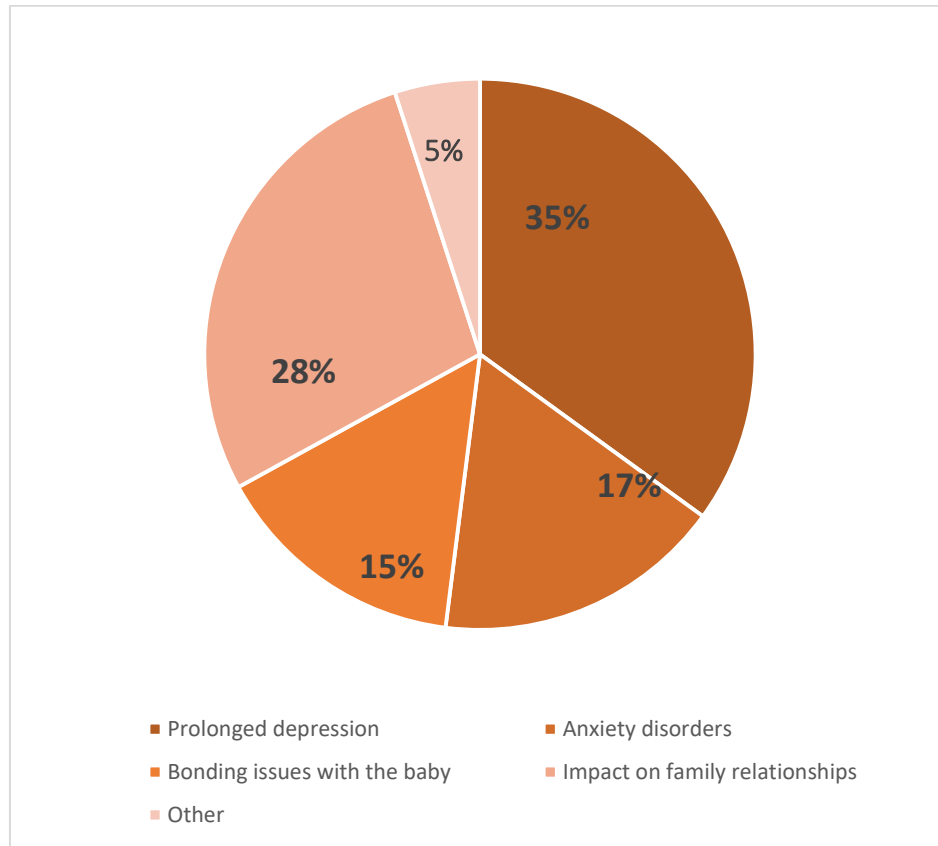


Figure 10: Common complications associated with untreated PPD

Conversation: In this survey, 35% participants retorted that prolonged depression is the most common complication associated with untreated PPD. Additionally, 28% responders replied that impact on family relationships, 17% replied that anxiety disorders & 15% replied that bonding issue with the baby is the most common complication associated with untreated PPD.

5.10 Key factors that contribute to complications in PPD

Q: What are the key factors that contribute to complications in PPD?

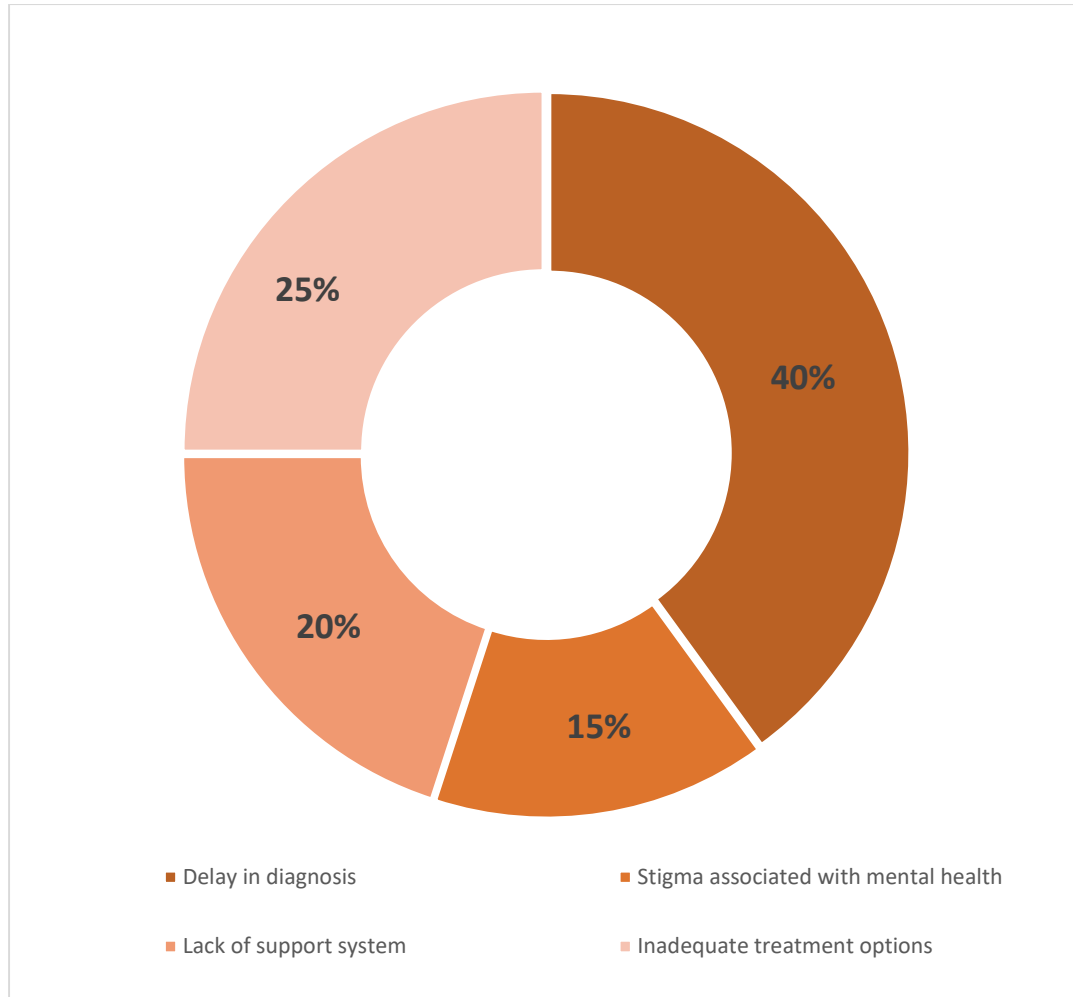


Figure 11: Key factors that contribute to complications in PPD

Discussion: Among the all participants 40% replied that delay in diagnosis is the key factor that contribute to complications in PPD. Moreover, 25% responders replied that inadequate treatment option, 20% replied that lack of support system & 15% responders retorted that stigma associated with mental health is the key factor that contribute to complications in PPD.

5.11 Treatment methods suggested by doctor for managing PPD

Q: Which treatment methods suggested by doctor for managing PPD?

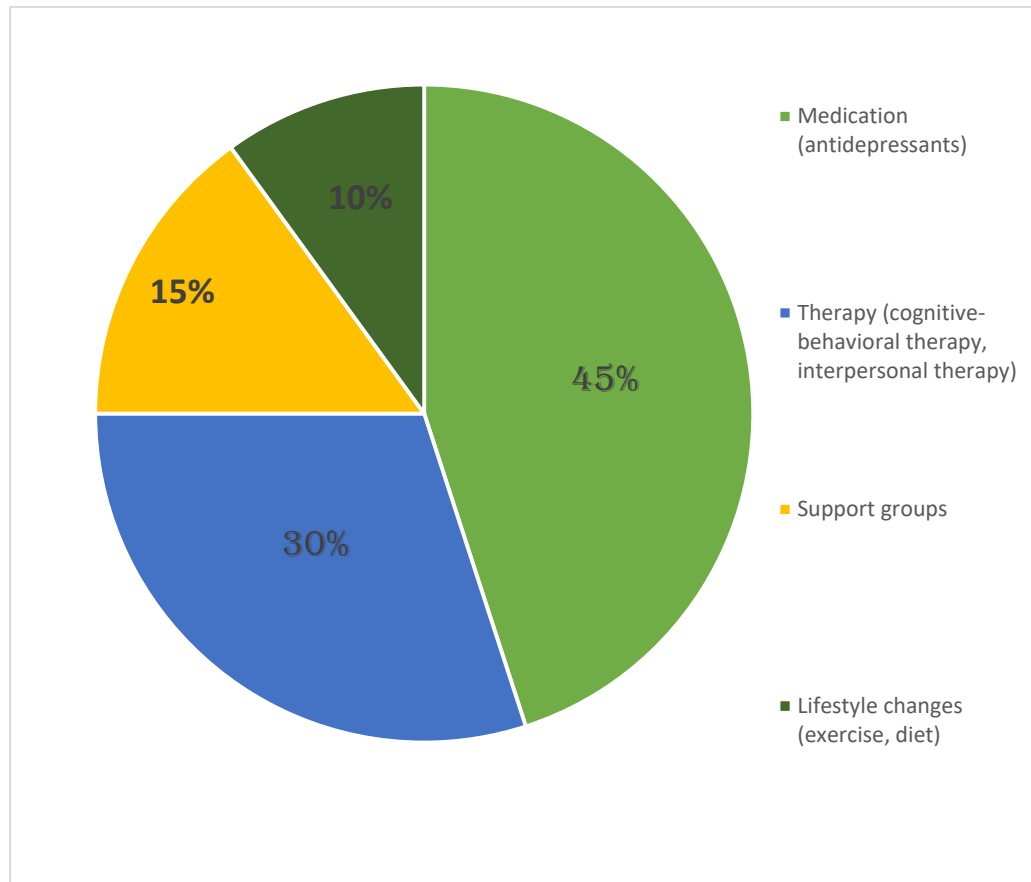


Figure 12: Treatment methods suggested by doctor for managing PPD

Discussion: As per this chart 45% responders replied that doctor has been suggested Medication (antidepressants) for managing PPD. Additionally, 30% responders retorted that doctor has been suggested therapy (cognitive-behavioral therapy, interpersonal therapy), 15% replied that support group % 10 replied lifestyle changes (exercise, diet) treatment methods suggested by doctor for managing PPD.

5.12 Satisfaction level on current management protocols for PPD

Q: How satisfied are you with the current management options for PPD?

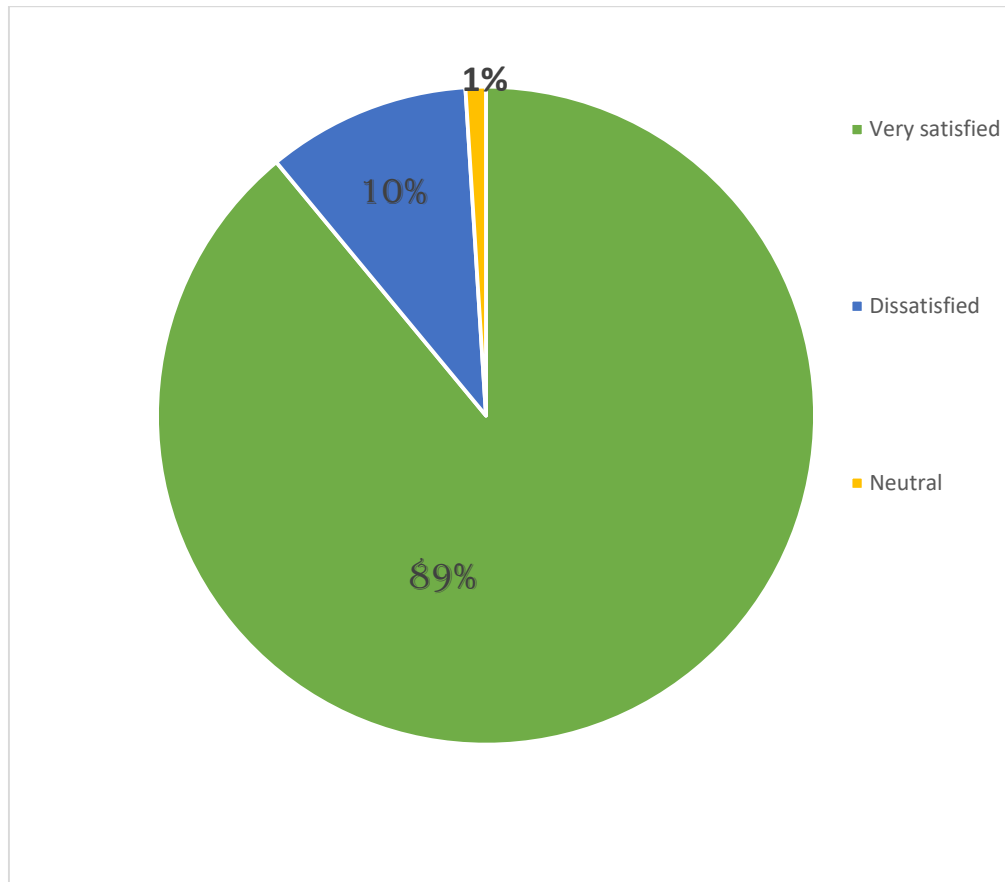


Figure 13: Satisfaction level on current management protocols for PPD

Discussion: Conferring to this education, the majority of participants (89%) indicated that they were highly content with the existing treatment procedures for postpartum depression.

5.13 Participated in any PPD support groups or community events

Q: Have you ever participated in any PPD support groups or community events?

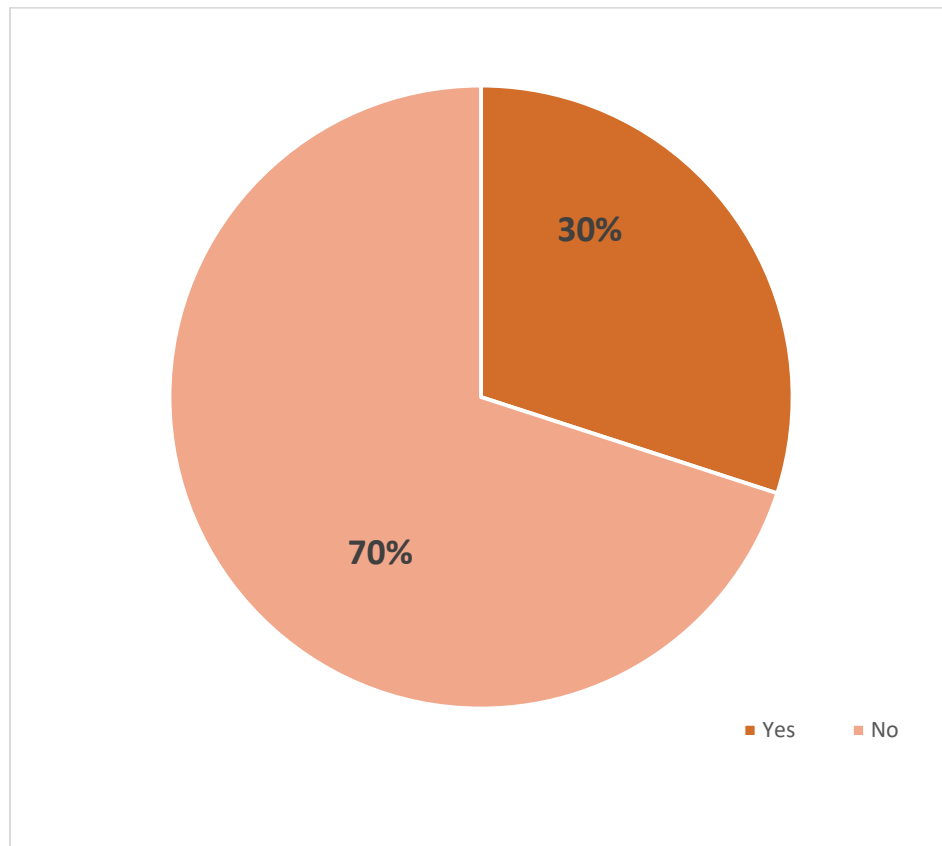


Figure 14: Participated in any PPD support groups or community events

Discussion: As per this study, 30% responders replied that they have been participated in PPD support or community events.

Chapter 6

Conclusion

6. Conclusion

In conclusion, the survey conducted at Ishwardi Health Complex, Pabna, on the prevalence, complications, and treatment of postpartum depression (PPD) provides crucial insights into the mental health challenges faced by new mothers in this region. The findings indicate a significant prevalence of PPD, highlighting the urgent need for effective screening and intervention strategies. Among the participants 60% of respondents stated that they were quite knowledgeable about postpartum depression. This poll revealed that 40% of respondents said they had been impacted by postpartum depression, whereas the majority of respondents (60%) said they had not been affected. In this investigation, majority of the responders 40% replied that they have been felt their symptoms is less than 2 weeks. 26% of respondents described experiencing crying too much. Furthermore, 15% of participants indicated suffering from depressed mood or severe mood swings, while 21% stated they had experienced Difficulty bonding with your baby. In this survey, 35% participants retorted that prolonged depression is the most common complication associated with untreated PPD. Among the all participants 40% replied that delay in diagnosis is the key factor that contribute to complications in PPD. Moreover, 25. 45% responders replied that doctor has been suggested Medication (antidepressants) for managing PPD. Conferring to this education, the majority of participants (89%) indicated that they were highly content with the existing treatment procedures for postpartum depression. Continued research and investment in mental health infrastructure will be essential to sustain these efforts and ensure that all mothers receive the support they need during the postpartum period.

Chapter 7

Reference

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