Risk Factors Associated to Postpartum Depression of Selected Mothers Southern Palawan

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Abstract

Lim, C. U. " **Risk Factors Associated to Postpartum Depression of Selected Mothers Southern Palawan**"

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Postpartum depression is a mental health disorder that affects women after childbirth; this affects not only the individual's well-being but also the development outcomes of their children. In the first year after childbirth, a depressive episode may occur. Postpartum depression presents a complex interplay of obstetrics risk factors, psychological, lifestyle, and social aspects. While a transition to parenthood is often portrayed as a joyful experience, many individuals encounter a stark reality characterized by persistent sadness, lack of interest, irritability with a hostile attitude towards the infant, self-blame, and feelings of humiliation. This study aims to explore the relationship of demographic data in developing PPD, risk factors and relationship between sociodemographic profiles and factors that contribute postpartum. Using a quantitative correlational approach, 177 random selected people from three selected barangay in Bataraza in Southern Palawan participated in the study. The researcher used a self-made questionnaire that undergone a pilot test and measured on a 4-point Likert Scale, gathered demographics and self-assessed competence. Descriptive analysis and Pearson Correlation were utilized for data analysis. Findings indicate that young mothers are at high risk in developing PPD due to unexperienced and immaturity. Single mothers or those lacking social support group are more vulnerable. Lower educational levels are associated with higher PPD due to financial strain and limited access to mental health. Those facing job-related stress experience or unemployed individual are risk due to financial instability and social interaction. Also, those mothers with lower income are also risk due to financial stress limit access to health care and inadequate childcare resources. demographic profile has a relationship with risk factors in developing PPD. This study emphasizes the needs to develop and implemented age sensitive programs, enhance social support networks through support and counselling services, healthcare units are should implement routine postpartum screening in order to identify at risk mothers early, local government should implement programs that offers resources and support to new mothers, future researchers are urged to conducts study in order to understands varying factors, and lastly healthcare organizations should engage community awareness campaign to educate the public about PPD and decrease social stigma. This research contributes to the understanding of PPD and highlights the importance of addressing mental health in postpartum care.

Chapter I
INTRODUCTION

This chapter presents the study's background, problem statement, significance, scope and delimitation, and explanation of key concepts of the research.

Background of the Study

Postpartum depression is a mental well-being disorder that affects women after childbirth; this affects not only the individual's well-being but also the development outcomes of their kids. First year after childbirth, a depressive episode possible occur. Postpartum depression presents a complex interplay of obstetrics risk factors, psychological, lifestyle, and social aspects. While a transition to parenthood is often portrayed as a joyful experience, many individuals encounter a stark reality characterized by persistent sadness, lack of interest, irritability with a hostile attitude towards the infant, self-blame, and feelings of humiliation by Carlson et al. (2024).

According to Carlson et al. (2024), globally PPD affects new mothers with an estimated prevalence of 17.22% which is why it garnered increasing attention in recent years. In Southeast Asia, the prevalence is notably significant, with 13.5% of postpartum women experiencing postpartum depression. However, actual figures may be higher due to underreporting and the humiliation associated with mental health issues Z. Wang et al. (2021b). A multicenter study conducted in the Philippines and published in 2019 found that 16.4% of new mothers experienced depression six weeks postpartum Carberg, J. (2024). Based on the significant data above highlighted that new mothers face this mental disorder. Risk factors associated with a high risk of developing postpartum depression were identified by Carlson et al. (2024). These include Psychological, Obstetric, Social, and Lifestyle.

This study was carried out at selected health centers focusing on women who visit postnatal immunization for their babies. This timeframe is particularly significant as it corresponds with a critical period for maternal mental health, including the risk of postpartum depression. Many mothers experience a range of emotions and trials during this time, and those struggling with postpartum depression may face additional barriers in terms of availing healthcare services like the expanded program of immunization.

The researcher investigated several potential research gaps: 1.) wide ranging study of respondent's sociodemographic profiles as this information helps you contextualize this study. However, the lack of existing detailed data makes this study difficult to identify specific correlations 2.) The risk factors associated with postpartum depression such as obstetric status, psychosocial influences, health-related issues, psychological factors, and environmental conditions require more thorough research. The literature and studies collected did not adequately address how these factors interact or their relative related in the context especially in selected communities in which the researcher decided to conduct this study 3.) The relationship between sociodemographic profiles and factors that contribute to postpartum is under study, and it created a gap in understanding how these profiles influence the development of depression among postpartum mothers.

This research about postpartum depression among mothers is needed for the following reasons: understanding the sociodemographic profile provides a crucial context in interpreting the incidence and factors associated with it in a specific population. in order to complete the insights about maternal

mental health, the researcher needs to explore various factors associated with postpartum depression. This multifaceted approach enables the identification of at-risk groups, which can enhance target intervention.

The inspiration for this study originated from a co-worker of the researcher who suggested exploring the experiences of postpartum mothers. The researcher is currently practicing her profession in a community where cultural practices like marrying at an early age. Many of these mothers face significant challenges in meeting their newborn's needs such as providing the essentials needs like baby clothes and diapers, but some come in to the hospital without anything. This issue highlights the socioeconomic difficulties they encounter. The researcher choose this topic in relation to her sister's experienced in terms of behavioral changes, shifts in thought processes and decision-making. This prompted further investigation into the factors that can trigger postpartum depression. The occurrence of familial support has important part in preventing the progress of postpartum depression. This remark underlines the importance of a strong support system for new mothers, particularly those facing financial and emotional challenges.

The researcher was mesmerized by her experience as a first-time mother, in which a range of emotions during the initial weeks postpartum. There were so many circumstances and challenges she experienced while adjusting to a new role as a mother. Family support and understanding, plays significant role by allowing an individual to express her feelings openly without fear or judgment. Deep talk with the researcher's husband provided her with reassurance and comfort. This event taught her that it's okay to seek support during challenging times and to experience a range of emotions as she adapted to motherhood. She emerged from this experience not only with a deeper bond with her loved ones but also with a greater understanding of the complexities of postpartum depression.

The following reasons need this study: Initially, it aims to identify the factors that initiate the development of postpartum depression in individuals. By exploring the factors we can gain insights into adjustments or challenges faced by postpartum mothers. Finally, identifying and implement available specific programs or resources from Department of Health to support mothers in their transition to motherhood that help them to divert and prevent depression among postpartum mothers. This specific programs can be their valuable guidance and educate the new mother navigate their new role. This study seeks to enhance the understanding of postpartum depression and improve the well-being of the mothers.

Statement of the Problem

Examining the contributing factors of postpartum depression of selected mothers in Southern Palawan is the goal of this study. It specifically aims to respond to the following queries:

1. What is the respondent's sociodemographic profile in terms of?

a. age,
b. marital status,
c. education level,
d. employment status,
e. Household income,
f. Number of pregnancies and
g. Types of delivery?

2. What are the risk factors associated with high postpartum depression scored mothers based on the Edinburg scale as:

a. obstetric status,
b. psychosocial,
c. lifestyle and
d. Psychological?

3. Is there a significant relationship between the respondent's profile and the risk factors associated with postpartum depression?

4. What postpartum enhancement program can be proposed based on the results of the study?

Significance of the Study

The significance of a study presents the importance of the research conducted and its contribution to advancing knowledge in a particular field. This study will be deemed significant to the following:

Department of Health, essential information on the prevalence and risk factors of postpartum depression in the selected area will be provided by this study. The DOH will be able to use this information to required seminars and training for healthcare providers, generate focused mental health wellness programs that cater to the unique needs of new mothers and incorporate mental health support into maternal care.

Nurses, by able to identify and understands the risk factors it can help in the early detection and intervention to ultimately improve the well-being of mothers and their infants. This research highlights the importance of support and education for postpartum mothers by enabling nurses to develop targeted care plans that address the unique challenges faced by this population. Furthermore, the findings can be a framework for nurses to reinforce training and seminars to equip them with the knowledge and skills necessary to recognize the signs of PPD and provide appropriate early nursing interventions, resources and referrals. Additionally, this study fosters a greater awareness of cultural and socioeconomic factors influencing maternal mental health in Southern Palawan. Lastly, this research enhances maternal healthcare services by promoting healthier outcomes for mothers and their families.

Selected Rural Health Units (RHU), as it addresses a critical maternal mental health care gap. By knowing the specific needs and challenges postpartum mothers face, this study can help develop targeted mental wellness programs. Healthcare workers can quickly identify and give timely interventions and support by having enough knowledge about the symptoms and risks of postpartum mothers. The result of this study can enhance the healthcare professional's understanding of maternal care.

Postpartum mothers, this study sheds light by raising awareness of postpartum depression and helping mothers identify their symptoms and risk factors of postpartum depression. In this way, mothers can seek help and foster a supportive environment. And lastly the result of this study can improve maternal mental health programs that can provide resources and support and enhance the well-being of mother and their family.

Readers, this study highlights the critical issue of postpartum depression among mothers, promoting awareness and understanding of the incidence and contributing factors. By presenting the research findings the readers will be informed about what challenges will new mother may experience, encouraged them to learn and able to have supportive community. The study also highlighted the importance of mental wellness program resources and helped create a more informed and compassionate community.

To future researchers, this study can be a foundation of postpartum in a specific geographical context. Identifying the risk and prevalence rate can be a framework for exploring the social, economic, and

psychological aspects of postpartum depression. This study help investigate further future interventions by comparing results in different geographical areas, contribute to a broader knowledge base on maternal mental health and enhance community support for mothers worldwide.

Relatives and Immediate Family, this equips families with essential knowledge to recognize signs of distress in new mothers. This study enables family members to provide appropriate emotional and practical assistance in postpartum mothers. It also emphasizes the importance of open communication within the family about mental health by encouraging family members to engage in discussions that can alleviate stigma and promote understanding. Involving each family members in the conversation about PPD helps to create a network of support that can significantly enhance the well-being of mothers. This research empowers families to play an active role in maternal health contributing to healthier dynamics and improved outcomes for mothers and their children in Southern Palawan.

Scope and Delimitation of Study

The study's scope is divided into research methodology, concept, population, geography, and strategy development. The respondents in this study were 177 postpartum mothers who visit the health centers of the three (3) with the highest record of healthcare centers in Bataraza- Barangay Rio Tuba, Barangay Taratak, and Barangay Sumbiling. Respondents who are 6 weeks postpartum. Data collection will occur at the health center during vaccination day. Quantitative survey in conjunction with a correlational method approach was used in collecting the patient's profile, risk factors associated with postpartum mothers, and the relationship between demographic data and factors. Finally, enhancement of the postpartum program will be designed to address the particular issues that postpartum depression patients in Southern Palawan have identified as impeding their ability to ask for assistance.

The study is delimited to specific geographic locations and defined populations focusing exclusively on mothers who have given birth between 6 weeks to one year and are utilizing health center services. This approach excludes those seeking care elsewhere and those experiencing postpartum depression for the first time. Additionally, the study will not address postpartum depression in urban settings or among mothers with significant comorbidities that could complicate mental health assessments. The approach aims to provide specific insights that can guide the implementation of the present mental wellness of postpartum. This study was conducted on second semester of the 2024–2025 school year in which the research explored the respondents sociodemographic profiles, investigate whether there is a significant relationship between these sociodemographic factors and risk factors associated with PPD , thus enhancing understanding of the experiences faced by new mothers within this population.

Definition of Terms

The following terms are defined theoretically and operationally in this research context to understand this study better

Cesarean section delivery. It refers to a surgical procedure to deliver a baby through an incision in the abdomen and undergo anesthesia. This contributes to developing postpartum depression by influencing recovery time, feelings of loss regarding the birth experience, and potential complications that may affect emotional health.

Complications. It refers to the adverse medical or psychological issues that can arise during or after childbirth, especially exacerbating a mother's emotional well-being and increasing the likelihood of experiencing depressive symptoms.

Early postpartum. It refers to the period immediately after giving birth, up to six weeks. This timeframe involves the healing process from childbirth, a range of emotions critical for initiating initial breastfeeding.

Lifestyle. Refers to daily habits that influence a mother's physical, emotional, and mental well-being after giving birth. It also involves various aspects like dietary choice, sleeping habits, and substance abuse during the postpartum period.

Mothers. It refers to female individuals who recently gave birth and experienced a range of physical, emotional, and psychological changes. During postpartum weeks, this person may develop postpartum depression that interferes with their ability to care for themselves and their newborn.

Mental Wellness Program. This refers to numerous programs that help individuals transition to a new role as mothers. These programs aim to increase awareness, educate mothers and families about resources and when to consult with healthcare with healthcare professionals and provide the necessary support to help them cope with motherhood.

Obstetric Status. A complete history of reproductive and pregnancy experiences, containing a range of factors that influence her childbirth outcomes and overall reproductive health.

Postpartum. Refers to the period following childbirth. This period can be extended beyond six weeks as a mother adapts to a new role. Mothers recover from the birthing process during this phase and adjust to motherhood.

Postpartum Depression. It refers to a mental disorder in which an individual experiences a range of emotions more than six weeks after childbirth; having this indication can hinder self and childcare.

Postpartum enhancement program. Refers to a planned initiative designed to provide mothers with support, education, and resources. This program helps eliminate the risk factors for developing postpartum depression and promotes mental well-being.

Psychological. It refers to the mental health and emotional processes that influence a mother's experience after giving birth. It includes the mother's previous mental health issues, which can increase her vulnerability to postpartum depression, as well as her coping mechanisms for managing stress and adversity. It also encompasses self-esteem and identifies changes during the transition to motherhood, which can affect emotional stability.

Psychosocial. It refers to thoughts, emotions, and actions reshaped by individual social environments and relationships. This interplay means that social influences such as family dynamics, community support and cultural norms can significantly affect a person's mental well-being.

Risk factors. It refers to the characteristics or circumstances, such as lack of support and stressful events, that may increase the likelihood of a mother experiencing depressive symptoms after childbirth.

Rural Health Unit. It refers to a healthcare unit that functions as the line provider of essential medical services to rural communities. It serves as a first-person contact for residents seeking healthcare and aims to improve access to medical care in underserved communities.

Vaginal delivery. It refers to the process of giving birth through the vaginal canal, and it can influence postpartum mothers by affecting their physical recovery, emotional well-being, and cultural expectations surrounding childbirth.

Chapter II
REVIEW OF RELATED LITERATURE AND STUDIES
This chapter presents the relevant literature and studies that the researcher considered to strengthen the

importance of the present study.

Related Literature

In a new study by Swensen (2022), the result is that first time mothers are at highest risk of postpartum depression, women aged 25 and younger, and mothers of twins. An article says that the highest proportion of women reporting symptoms of postpartum depression occurs in the 18 to 24 age group, with a rate of 10%. This rate decreases of 6.5%, as the women reached aged 35 to 39 and rising slightly to 6.9% for those aged 40 and older. Additionally, beyond all age groups, women who are multigravida reported significantly lower rates of postpartum depression compared to first-time mothers.

Paddy (2021), studied identifying the psychosocial determinants of postpartum depression in Accra metropolis. In this study, the researcher involved mothers who given birth for about 4-12 weeks with ages 15-39 years old. The result of this study was 14.1% mothers were emerged and predicted by anxiety, stress and marital satisfaction among couples. On the other hand, the result of this study revealed that inadequate social support and dissatisfaction with marriage put the mother a risk of developing postpartum depression which has an impact on maternal well-being. This study concluded that PPD is common in postpartum mothers and psychological variables was significant. This result, requires healthcare professionals to pay attention for holistic healthcare.

A cross-sectional study involves mothers who delivered their babies and undergone postnatal care at a tertiary hospital as a sample using the EPDS. The participant's were selected based on their age (18 to 35 years old). For most of the mothers, the parity is two and they had an institutional delivery. The result of this study was 30.84% postpartum mothers were classified with depression. Educational status, monthly income of the family, rural residency, more than 3 parity, preterm delivery and adverse events in newborn has a significant contribution in developing PPD. The researcher concluded that depression is a common mental health problem in postpartum mothers Dubey et al., (2021).

According to Reloj (2024), a study about The Lived Experiences of Single Mothers after childbirth highlighted the problems they face as a student at the same time as a single mom. The respondents of this study were from Satellite campus students and using snowball the researcher identified 15 young single mothers. The respondents identified different indications of postpartum depression such as insecurity, tearfulness, irritability, physical symptoms, self-blame, self-harm, unreasonableness, giving up, isolation, and suicidal ideations. According to them the symptoms they experienced were due to abrupt changes in their life as a new mother. They also enumerated different coping strategies like emotional focused, problem focused, and religious coping. The researcher suggested that the future researcher should investigate the identified coping methods mentioned above.

Postpartum depression (PPD) is a mental disorder that affects women following childbirth as noted by R. Wang (2024b). In one of the study by the cited author above it resulted that educational attainment influence the development of postpartum depression. The research findings suggested that higher educational attainment serves as a protective factor against this condition, potentially equipping women with better coping mechanisms and access to resources that can mitigate the effects of postpartum challenges.

A study by Z. Wang et al. (2021b), examined the global prevalence of postpartum depression among women and found that those living in low- or middle-income countries experience higher rates of this condition. This research emphasizes the significant impact of socioeconomic factors on mental health indicating that women in these regions may face increased vulnerability to postpartum depression due to

a combination of limited access to healthcare resources, social support and economic instability. The findings underline the need for interventions and support systems to address the mental health needs of postpartum women, particularly in lower-income settings.

A comprehensive investigation conducted by Low et al. (2023), revealed a significant correspondence of higher level of emotional support were associated with a decreases risk of developing postpartum depression among postpartum mothers. The discussion highlighted notable cultural differences in seeking emotional assistance particularly among Asian women who tend to be less likely to reach out for support compared to their counterparts in other cultural contexts. The reluctance is often influenced by cultural norms and expectations that may discourage open discussions about emotional struggles.

Pedersen(2021), identified and explained the risk factors of postpartum depression like genetics, chronic history of trauma, gender, poor nutrition, loss, personality, medication and substance use. In some cases of depression there are various factors that may be present and specific factors are more weigh on different individual. Genetics play a significant role in depression, if one member of the family has depression you have a higher chances of developing depression compared to an individual without a family history. A study in exploring the development of PPD was conducted and the respondents were twins in which the genetics in the identical twins were 100% compare to fraternal which is 50%. If the genes will be involved in the development of PPD, we expect that if one of the twins diagnosed with depression you expect that the other twin has the possibility to have depression also. Through this studies, researchers found out the major depression is heritability. In this study includes also that eating healthy or nutritious foods can help in brain function. If an individual didn't get enough nutrients that the body needs, you have a higher chances in developing physical and mental health problems. Pedersen mentioned that in some studies says regular consumed of process foods and simple carbs may increase someone risk of depression. Low blood levels of vitamin B9, vitamin B12, vitamin D, zinc, copper and manganese found out in patient with depression. It is recommended to eat foods rich in these nutrients, taking a supplement and consuming Omega 3 fatty acids found in fatty fish, algae, walnuts and chia seeds may help ease depression symptoms.. Pedersen also mentioned that substance abuse including the prescribed medications can lead to depressive symptoms. The study suggests that nearly half of these depressiv episodes occur through heavy alcohol use.

According to Ghaedrahmati and Alipour (2024), the potential causes of postpartum depression are low levels of vitamin D, iron, folate, and carbohydrates, and an unhealthy diet lacking in vegetables. However, the impact of zinc, omega 3 essential fatty acids and other nutrients such as antioxidants, vitamin E and vitamin C on postpartum depression is unclear due to contradictory information. Lastly the researcher highlighted that there is a notable gap between the lack of group B vitamins and postpartum depression. In conclusion of the researcher, giving dietary education to postpartum mothers can lower the risk of developing postpartum depression. Paying attention to diet and making sure enough consumption of vitamins and nutrients to prevent postpartum depression.

Radzi (2021), analyzed the equation of symptoms of postpartum depression in survey-based in which involved 387 postpartum women using Edinburgh Postnatal Depression Scale (EPDS) resulting in 79.6% of the respondents having depression symptoms. Lifestyle, eating unhealthy food and BMI variables were found to be significant in affecting dependent variable. Based on the result of the study, respondents with high level of depression symptoms consumed more unhealthy foods and has high BMI.

Yuan (2022), studied the effect of physical activity on the prevention of postpartum depression. The researcher mentioned that exercise is considered a preventive intervention for postpartum depression but

there is not enough evidence. A multi-study was conducted and the analysis showed a statistically significant between physical activity and postpartum depression prevention concerning physical activity type like sports activity with relieving postpartum depression while working and household activities contributed to a greater risk. Yuan concluded that physical activity reduces the risk of postpartum depression and it requires at least 1hour an d30 minutes of activity per week could effectively decrease the risk of developing postpartum depression.

Kjeldsen (2022), investigated the association between a family history of psychiatric disorders and the risk of developing postpartum depression within 12 months postpartum. Meta-analysis results that family history of mental health problem has a greater chances in developing PPD. Kjeldsen concluded that mothers with history of mental health in the family has a greater chances to have PPD compare to mothers without.

Johansen (2020), compare the risk of postpartum depression with prior psychiatric diagnoses. There were 5% postpartum mothers with no history developed depression compared to 65% of women who has depression before and during pregnancy. The researcher concluded that the history of depression has a significant impact in developing postpartum depression. Johansen also mentioned that all other psychiatric disorder has the high risk of developing postpartum depression. And they also suggested that healthcare providers must assessed, monitored, health educate women who are categorized with high chance in developing PPD.

A systematic literature review of Peñalba et al. (2022), explored various nursing interventions for postpartum depression and their associated outcomes. This study highlighted the role of a nurse is crucial in managing postpartum depression through interventions, including health education, comprehensive perinatal assessments, counselling, nurse-delivered psychotherapy, provision of social support, administration of medications, and of complementary and alternative the integration therapies alongside conventional treatments. The authors concluded that the exists a diverse array of nursing interventions aimed and addressing postpartum depression. They emphasize the importance of implementing postpartum education through nursing assessments not only in the postpartum period but also during prenatal care. Early identification of risk factors in individuals can facilitate timely interventions and potentially improve maternal mental health outcomes. Furthermore the review underscored the necessity of coordinated care and a multidisciplinary approach advocating for patient referrals to enhance the effectiveness of postpartum depression management.

Related Studies

An investigation into postpartum depression among mothers in Ghana Bawku municipality sought to determine the condition's prevalence and risk factors. In all, 242 postpartum women between the ages of 2 and 12 were chosen randomly for this cross-sectional analytical study. The data resulted that 34.7% of the respondents were ages between 25 and 29 years old. Fifty-four percent of people had postpartum depression. Inadequate prenatal visits, obstetric complications, being under 3 weeks postpartum, being between 6 and 8 weeks postpartum, and stressful life events were among the significant risk factors identified. This study found that PPD was highly prevalent in postpartum women in the Bawku municipality and identified important predictors. It plays a major role in the battle against maternal mental illness and the conditions that lead to it Daliri et al. (2023).

A study in different countries in the Middle East between 2006 to 2020 by Ahmad et al. (2021), showed that an estimated pool of postpartum depression among mothers was very high, 27%. Factors were

identified or resulted to be significant including low income status, complications related to pregnancy, educational attainment, unplanned pregnancy, employment status, not enough family or partner support and feeding formula. Poor economics and complications during pregnancy have a significant relationship with postpartum depression. The researcher concluded that the Middle East has a higher prevalence of postpartum depression based on this study. Ahmad recommended that routine screening for depression in this area is needed. He added that maternal mental health care in clinical practice must be integrated during postpartum.

A psychiatric disorder that afflicts women after childbirth has a substantial concern with a prevalence that demands attention. The researcher suggests addressing this condition to reduce disease and economic burden was important. Educational attainment may play a role, but they indicated a further study. To clarify and explore the relationship between educational attainment and the onset of postpartum depression, this study employs a two sample Mendelian Randomization analysis leveraging years of schooling as a proxy variable. The analysis results indicated that a higher level of education is a preventive variable for postpartum depression. Information dissemination and enhancing women's educational attainment is a must to safeguard women's physical and mental health (R. Wang 2024).

In a study in the United Arab Emirates by Hanach et al. (2022), involving 457 women, 35% exhibited symptomatology of postpartum depression within the first 6 months postpartum. Less than 25-year-old women, parttime job, social support and unable to managed monthly expenses was identified to be a contributing factors in developing postpartum depression. Partner support and employment resulted to be not significant in developing postpartum depression. Maternity leave of more than 3 months can increase the risk of postpartum depression. Muslim women are at higher risk whereas mothers who breastfed babies and perceived their children is healthy have lower risk.

A survey study by Alloghani et al. (2024), involving 200 women who had a recent delivery in the past six weeks. Sociodemographic, obstetrical status, psychosocial, and psychological factors included in assessing . The Edinburgh depression rating scale was used in the identification of women with possible postpartum depression. The result of this study, found to be 57% of the population, is a prevalence of postpartum depression. There is a significant difference in terms of life events, emotional support, marital conflicts, and history of depression with or without postpartum depression. The researcher concluded that to address the issue in this study, urgent policy initiatives are needed to help pregnant women access comprehensive postpartum services and strengthen support from family and health education for the community.

In a study conducted in China from March to June 2017, 817 women participated 45 at six weeks postpartum. Social support through seeking care from in laws had a direct and indirect effect on postpartum depression. Sleep quality is a consequence of postpartum depression after six weeks of delivery. The minor prevalence was 49.47%, and the major was 23.13% of depressive symptoms at six weeks a total of 371 women, or 45.41%, experienced sleep disturbance six weeks after giving birth. The researcher suggested that interpersonal relationships with a family play a vital role and sleep quality through social support in Chinese women. It might reduce postpartum depression and sleep disturbance in terms of improving the relationship between new mothers and their husbands or in-laws (Qi et al. 2022).

According to Karl et al. (2020), Western women work during their reproductive years. The aim of this research is to assessed the pregnant women working conditions and psychosocial work stress. In this study, the researcher selected 587 employed women who work during pregnancy and their mental health

8 weeks after delivery. The result of this study are work conflicts and no recognition at work significantly predicted symptoms of postpartum depression. Maternity leave found that low wages or insufficient wages can contribute to the risk of developing postpartum depression. Even when controlling for lifetime depression, anxiety, education, parity, and age. The study highlights that recognition at work, or incentives can prevent in development of postpartum depression, and it emphasizes the importance of a supportive work environment for postpartum women.

In a recent meta-analysis by Pacho et al. (2023), examined the proportion of postpartum depression among substance users during pregnancy compared to non users and investigated the specific risk associated with different. Among the 26 studies included covering 514,441 women, the merged occurrence of postpartum depression among mothers who used prohibited drugs during pregnancy were 29%. This study revealed that 3.67 indicates a significant relationship to have postpartum depression among prohibited drugs users compared to nonusers. Tobacco and multiple substance has a higher chances to have PPD. Also alcohol use showed significant trend in developing PPD but there is no definite data to support. This analysis provides evidence of an increase in pregnant substance abuse particularly in multiple substances.

According to Cho et al.(2022b), that women who experience low social support and have a history of pregnancy loss are ten times more likely to develop postpartum depression. This aligns with the above study in which they suggest that previous pregnancy loss acts as significant modifier between social support and postpartum depression. The heartache related with losing a pregnancy can leave women predominantly vulnerable to a develop of mental health issues including depression, mood disorders, and in severe cases suicidal ideation. Previous studies resulted that women who have history of miscarriage or stillbirth are seven to nine times are more likely to experience depression compared to those without such a history Cho et al.(2022b).

The study conducted by Grisbrook et al. (2022), in which they explored the connections between cesarean section births, post-traumatic stress, and symptoms of PPD. The findings revealed that unexpected or emergency cesarean deliveries may suggestively contribute to develop PPD. The research indicated that women who experienced emergency C-sections reported to have more than one symptoms of postpartum post-traumatic stress disorder (PTSD) in which were related with an increase in PPD symptoms among mothers. This study highlights the indirect connection between emergency cesarean sections and maternal symptoms of PPD. It suggests that unplanned surgical deliveries have a depressingly impact in women's perceptions of their childbirth experience that potentially leading to adverse mental health outcomes.

Synthesis

The above studies and literatures reliably supports a strong correlation among socio-demographic factors and postpartum depression. Researcher indicates that various elements can contributes in developing postpartum depression such as age, marital status, education level, employment status, and household income, significantly influence the likelihood and severity of postpartum depression among new mothers. For instance younger mothers are often at a higher risk due to less life experience and increased stress from parenting challenges. Marital status plays a critical role, women who are single or in unstable relationships frequently report elevated depressive symptoms compare to women who has supportive partners. Having someone beside you after childbirth can help you by providing essential emotional and practical assistance during this challenging period. Education level also appears as a crucial factor in

which with higher educational attainment generally comparing with lower rates of postpartum depression because due to well access to resources and coping strategies. Based on this results of the study, it is vital to advocate in order to ahve equitable access to education and prioritize initiatives that enhance womens educational opportunities. Employment status introduces another level of complexity as working mothers may face unique stressors related to balancing professional and family related responsibilities. Also household income is a significant determinant with lower income levels associated with increased stress and limited access to support resources to further exacerbating feelings of isolation. As a conclusion these sociodemographic factors are vital for understanding the dynamics of postpartum depression and can contribute in developing targeted interventions to support new mothers.

Postpartum depression is influenced by a range of interrelated factors, including obstetric, psychological, lifestyle, and psychosocial elements. Obstetric factors such as first-time mothers are at risk of developing postpartum depression due to experiencing adjustment to a new role and responsibilities compared to mothers who experience previous pregnancy. Women who experience traumatic births like cesarean sections or preterm deliveries often report higher levels of depressive symptoms because they are anxious in experiencing another traumatic incident. Psychologically, a history of mental health issues can contribute women to postpartum depression because this underlying conditions may reoccur in the postpartum period. Lifestyle choices that affect general wellbeing and can worsen depressive symptoms include sleep deprivation, poor diet, and insufficient exercise. Finally psychosocial factors, social support and relationship status play a crucial role in mental health outcome. Women with strong support group tend to fare better emotionally, while those facing isolation, relationship stress, or financial constraints are more vulnerable to postpartum depression.

This study aligns with the existing literature by concentrating on postpartum mothers and the factors that increases the progress of postpartum depression. However, it distinguishes itself from other research by comparing data across different health centers and examining the prevalence of postpartum depression alongside the contributing factors. The insights gained from this study can be used to assess postpartum depression among mothers and to inform the development of targeted maternal mental health programs.

Theoretical Framework

The three nursing theories and two non-nursing theories were applied to the investigation of this study. The Adaptation Model by Calista Roy, the Maternal Theory of Dr. Judith Mercil, the Self-care deficit Theory by Dorothea Orem, the Postpartum Depression Theory by Cheryl Tatano Beck and Stress and Coping Theory by Richard Lazarus and Susan Folkman.The researcher will describe how various factors relate to develop postpartum depression.

According to Sister Callista Roy, she sees the individual as a set of interrelated systems that maintain a balance between various stimuli (Bsn 2024b). Adaptation Model focuses, on how individuals adapt to changes in their environment. This model can be particularly useful for understanding how new mothers cope with physiological, psychological and social changes that occur after giving birth. According to Roy's model, adaptation is a process where individuals respond to stimuli an example of this is the challenges of motherhood and the risks associated with postpartum depression. This theory can help explore how postpartum women adapt to the changes after giving birth. The theory can guide research into understanding how various factors (e.g., stress, support systems, health conditions) affect a mother's ability to adapt and cope, which may influence the onset and severity of postpartum depression. Researchers can also evaluate how effective nursing interventions, help mothers to better adapt to their

new roles and prevent depression.

Dr, Judith Mercil Maternal theory focuses on the unique maternal experiences and perspectives in understanding maternal health, particularly in relation to PPD. It emphasizes how maternal mental health affects family dynamics and child development making it to address PPD. In this theory it highlights how important is social support networks in which it can reduce PPD symptoms and aid recovery. It also considers how cultural beliefs affects mothers experiences and response to PPD. By promoting tailored interventions this theory emphasizes the importance of comprehensive support systems to improve well-being of both mother and their children.

According to Dorothea Orem the ability to selfcare activities to maintain health and well-being. It emphasizes that new mothers face challenges in managing their own health and well-being after childbirth. New mothers often struggle with recovery from childbirth which includes pain, fatigue, and hormonal changes. Emotional challenges experience by many mothers in which can hinder their ability to take care for themselves. Also the demands of time in caring for a newborn can live little time for self-care like rest, eating and exercise. Lack of support can exacerbate self-care deficits, making it difficult to ask help. Lastly new mothers are prioritizing baby needs over their personal health and well-being. This theory guides the researcher in assessing the ability of postpartum mothers to self-care and planning appropriate interventions to help regain their self-sufficiency.

Cheryl Tatano Beck's cognitive theory states that emotional disturbances such as anxiety and depression emerge from dysfunctional information processing (Weiland et al., 2017). It emphasizes the contributions of emotional, psychological, and social factors may add up in PPD development. This framework is relevant in guiding research focused on understanding the various stages of postpartum depression. By identifying key risk factors such as personal history, social support and the challenges of maternal role adjustment. Beck's emphasis on the lived experiences of postpartum women provides a valuable foundation for qualitative and mixed methods research by enabling deeper exploration of mothers emotional states and their transitions to motherhood.

Lazarus and Folkman's model emphasized the interplay between an individual's perceived psychological stress, coping, and cognitive appraisals Cummings & Kouros(2008). It focuses on how individuals appraise and cope with stressful events. It suggests that how a person perceives and handles stress influences their emotional and psychological well-being. Researchers can investigate how new mothers perceive the stress of childbirth, motherhood and related changes. The effectiveness of coping strategies used can be resulted of developing postpartum depression.

Figure 1. The Theoretical Framework
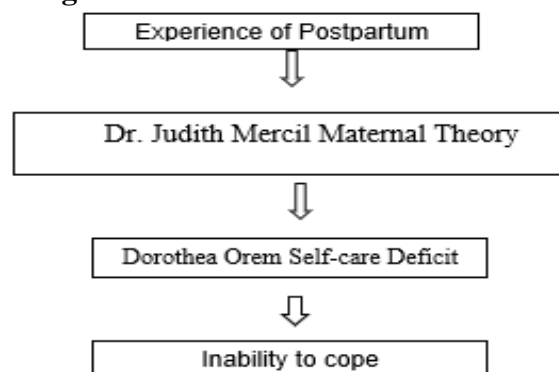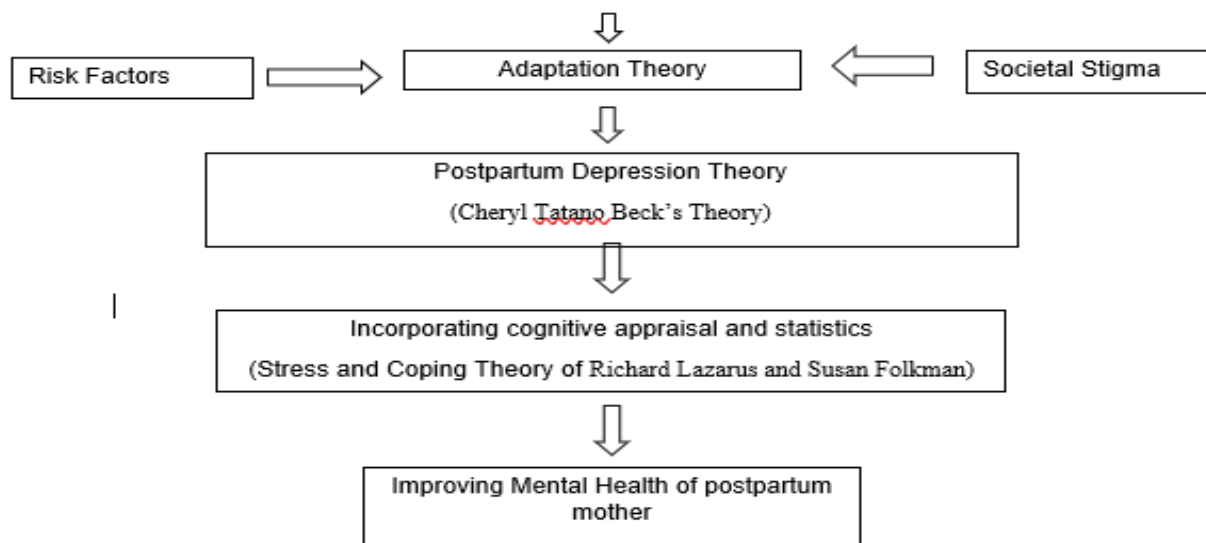
A thorough grasp of postpartum depression and the variables that influence its onset is offered by the conceptual framework depicted in the picture. The Experience of Postpartum which stands for the difficulties and adaptations of new mothers encounter following childbirth is central to this framework. Materna Theory of Dr. Mercil this can be used as a framework in PPD by emphasizing the unique experience and challenges of mothers. Self-care Theory of Dorothea Orem emphasizes the importance of individual ability to selfcare to maintain health and well-being. The Adaptation Theory, states that an inability to cope with the postpartum experience may lead to postpartum depression. Numerous risk factors such as psychological, social, and physiological aspects, contribute to this incapacity to cope. The framework also recognizes the part that social stigma plays in exacerbating the difficulties that new mothers encounter. Cheryl Tatano Beck's Postpartum Depression Theory serves as the basis for understanding the underlying mechanisms of this mental health condition. The framework also incorporates cognitive appraisal and statistical approaches such as the stress and coping theories of Richard Lazarus and Susan Folkman to provide more holistic understanding of the factors involved.

Conceptual Framework

The factors associated with postpartum depression, which affects mothers in many ways, must be identified to develop effective interventions that can enhance maternal mental health in the community. Respondents from different communities may experience Incorporating cognitive appraisal and statistics (Stress and Coping Theory of Richard Lazarus and Susan Folkman) Improving Mental Health of postpartum varying contributing factors or causes of postpartum depression. Each community has a unique healthcare system can lead to differences in mental health outcomes. Furthermore, the profiles of the mothers and the identified risk factors can influence the results of the study. Identifying the relationship between this variable is important to through understands how postpartum depression develops in an individual.

Research Paradigm

The input-process-output model is a conceptual framework to understands and analyze the relationships between different variables and factors inside a system or problem. It is used in study design and visually depicts how data, actions, and outcomes move through a workflow or process.

Figure 2. The Research Paradigm
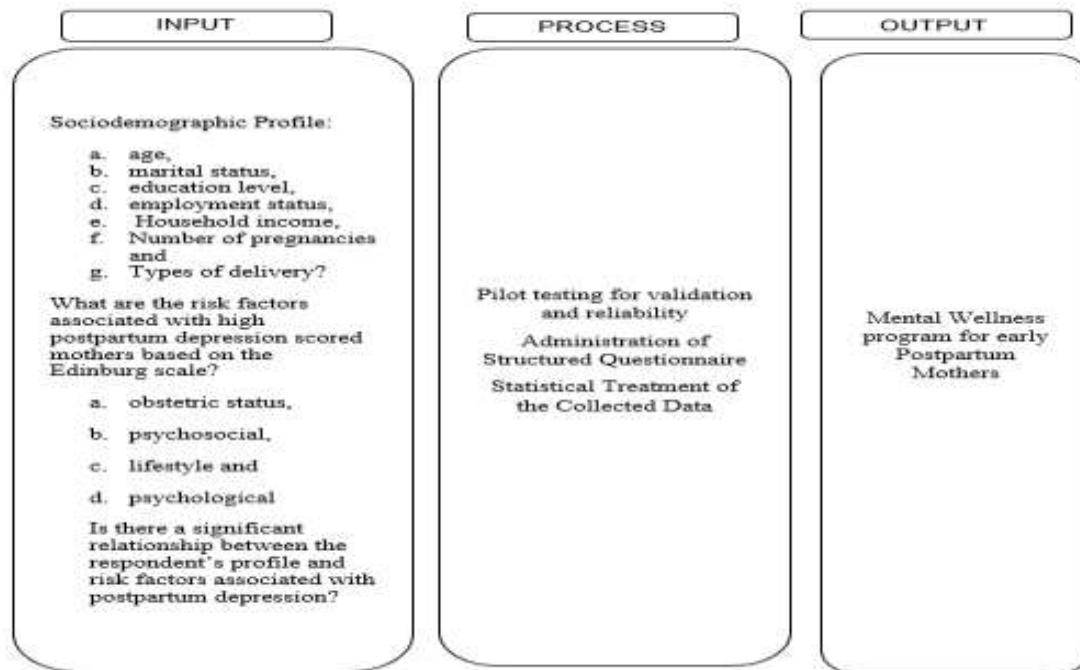
The relationships between the variables examined using the Input-Process-Output (IPO) model are depicted in the above diagram. The Input focuses on the sociodemographic profile of the respondents, risk factors associated with postpartum depression and is there a significant relationship between demographic profile and . This provide an important context for understanding the potential contributors to postpartum depression in the community. The Process outlines is the key steps of the study such as pilot testing for validation, administering a structured questionnaire, and statistically analyzing the collected data. This stage aims to identify the associated risk factors in which are categorized into obstetric status, psychosocial aspects, lifestyle and psychological elements. And the Output suggests in enhancing propose postpartum program based on the study's findings. This intervention seeks to address the identified risk factors, to improve maternal mental health outcomes in the Southern Palawan region.

Chapter III
RESEARCH METHODOLOGY
This chapter presents the research design and methodology used, the research population/sample, instrumentation, statistical treatment, and the research procedures followed.

Research Design
This study used a quantitative correlational approach to gather information from a particular population. The study focusses on clinical and sociodemographic factors by this it will help in identifying potential risk factors and relationships associated to postpartum depression. This design is particularly useful for identifying trends and patterns without the need for long term follow up making it an efficient method for gathering crucial information that can inform local health policies and improve maternal care services.

This study entitled " Risk Factors Associated to Postpartum Depression of Selected Mothers Southern Palawan" is a significant research component of Medical Surgical Nursing and will be reviewed by the Board of Ethics Committee of Palawan State University before receiving approval. By following ethics committee approval, it will be sent to the dean of the graduate school to obtain permission to conduct the research, as well to the barangay Captain. Data confidentiality is preserved, and ethical standards were followed. Consider logistical and resource constraints when planning the sampling design.

The researcher is qualified to conduct a study with the following qualifications: a Registered professional that currently practices as a Team Leader Nurse at Emergency Department in RTNFI-Hospital. The researcher has a lot of experienced in terms of securing informed consent for various procedures, collecting data, collaborating with other allied professionals and data privacy. The study was administered in structured manner. Each participant were expected to answer the survey form with 10-15 minutes and another 10-15 minutes for debriefing and follow-up questions. The survey was scheduled to take place on Wednesday before administering schedule vaccination either in a conference room or in the selected barangay Health Center. The essential materials include printed survey instruments and consent forms. There was no audio or video recording during data collection.

The researcher facilitated the survey, ensure clarity, manage the environment and technical issues while participants will provide valuable data through their responses.

Research Participants

The research participants for the study were mothers who are 6 weeks up to 1 year postpartum and visited healthcare center in three selected Barangay which are Rio Tuba, Taratak and Sumbiling. Total sample size will be based on Cochran's Formula where the total respondents was computed with 95% confidence and a 7% margin error. A sample size of 177 postpartum mothers from the three-health care center will be selected from the 1,849 postpartum mother's total population size for the last three months. Using Cochran's formula, 65 out of 679 postpartum mothers from Rio Tuba, 59 out of 620 postpartum mothers Taratak, and 53 out of 550 postpartum mothers from Sumbiling. The researcher used a stratefied random sampling method to randomly choose the computed sample size of postpartum mothers in each healthcare center.

Furthermore, their contributions in this research can lead to enhancing overall societal health outcomes by informing local health policies and resource allocation. Stigmatization may occur in this study due to sensitive topic.

Inclusion criteria specified that the participants have experience a live birth while those with pre-existing mental health condition or severe medical complications will be excluded. Informed consent was obtained to safeguard that the participants understood the nature of the study, potential risks, and their rights including the option to extract their self in the study at anytime without penalty. The researcher may terminate the participation if the participants fail to follow the study procedures or guidelines, participants exhibit signs of significantly distress, behavioral changes, during study, ethical considerations in order to maintain ethical standards and lastly if there are concerns regarding the safety of the participants or if legal issues arise.

Research Instruments

The researcher develop a structured survey form as part of the study to meet the goals. The sociodemographic questions, and risk factors linked to postpartum depression were made up its two (2)

sections. Part 1 of the questionnaire includes sociodemographic such as age, marital status, level of education, employment status, household income, number of pregnancy and types of delivery.

Part 2 of the survey form is a 10 item self-assessment tool scored on a 4-point Likert Scale (1- Strongly Disagree, 2- Disagree, 3- Agree, and 4- Strongly Agree). Postpartum depression can be characterized by four factors: Obstetric status (questions 1–10), psychosocial (questions 11–20), Lifestyle (questions 21–30), and psychological (questions 31–40).

Data Collection Procedure

Before the data collection can begin, this study was essential panelist approval of the thesis concept, validation review, and ethics committee certification. The researcher obtained a letter of request for permission from the dean to carry out the study. The researcher asked the respected LGU official of the selected health center in Southern Palawan for approval. After being approved, the researcher worked with the Barangay Kagawad assigned to Health. The Barangay health workers also be asked for help in administering the respondents' questionnaires.

The researcher conducted pilot testing and expert validation of the self-made questionnaire for validity and reliability. Before handing out questionnaires, the researcher briefly introduced himself and the nature of the study. During their routine health visit, mothers were approached and provided with detailed information about the study including its purpose and procedures to ensure they understand their rights. Prior to participate, informed consent was solicited. In collecting data, self-made questionnaire was used in which it assesses risk factors of postpartum depression in addition to sociodemographic information. To protect participant privacy and comfort, this data collection was conducted over a specified period of time while closely following ethical guidelines. All information gathered safely coded and added to a database for examination enabling a thorough comprehension of postpartum depression in the region.

The study were involved 177 participants who meet the following criteria: 1. An individual engage in childbirth, 2. Atleast 6 weeks to 1 year postpartum and, 3. Without mental health issues or problems. This approach excludes those seeking care elsewhere and those experiencing postpartum depression for the first time. Additionally, this study does not address postpartum depression in urban settings or among mothers with significant comorbidities that could complicate mental health assessments. Participants engaged in answering questionnaires allowing for comprehensive data collection. Each participant was expected to commit approximately 15 minutes for answering the provided questionnaires. The total duration of the study will span of four months, during which data collected over scheduled weekly sessions.

Data Analysis Procedure

This study on postpartum depression at the selected health center in Southern Palawan involved quantitative methods. Quantitative information from standardized questionnaires like the own made questionnaire, were analyzed using statistical software to ascertain risk factors and assess correlations between symptoms and sociodemographic traits. Logistic regression and chi-square test was used to identify factors and significant data, while descriptive statistics used to summarize the data. To extract the meaning of all the quantitative data collected from questionnaire it must undergo statistical analytical techniques to determine the relationship between all variables identified associates with postpartum depression.

The research will be descriptive analysis in order to measure the central tendency, percentage and frequency. Data were in frequency table and percentage, starting from the lowest value, and working up to the highest and the overall average of the combined groups were assessed and assembled using a weighted mean. A Likert Scale was used in obtaining the specific response. And lastly Pearson Correlation was used in order to determine the discrepancy between expected and observed data.

Ethical Consideration

The Palawan State University Ethical Review Board provides support letters and ethical clearance. To protect the rights of participants, ethical considerations was crucial for the study on postpartum depression. It obtained another ethical clearance at selected Rural Health units in Bataraza. The researcher emphasizes a commitment to ethical integrity and transparency regarding potential conflicts of interest. The researcher declares no financial relationships with any entities and no personal affiliations that might create bias in the research process.

Participants were selected and invited by the researcher. The researcher identified all eligible postpartum individuals based on predefined inclusion criteria such as within the specific timeframe.

The participants in the postpartum period are considered vulnerable due to the significant physical, emotional, and psychological challenges they face after childbirth including the risk to develop postpartum depression in which can affect the mental health. This factor can impair their decision-making abilities. To protect this vulnerable individuals, this study implemented rigorous protocols, including obtaining informed consent in a supportive environment that emphasizes their autonomy and right to withdraw at anytime without penalty. Participants have direct benefits in this study by accessing to medical or psychological interventions and personalized feedback. Respondents may have community support through connections with others with same experiences, fostering sense of belonging and shared experience.

Participating in this study is entirely voluntarily and there is no monetary reward. In this study the respondents may benefit in terms of gaining knowledge or resources related to health. Snacks will be provided by the researcher. Furthermore, their contributions in this research can lead to enhancing overall societal health outcomes by informing local health policies and resource allocation. Stigmatization may occur in this study due to sensitive topic.

Informed consent obtained by the researcher. This process will occur in community health center to ensure that the participants can feel free to discuss their concerns confidentially. Consent obtained during initial recruitment phase. During the first phase, the researcher explained comprehensively the purpose of the study, procedures, potential risks, benefits, and participants rights, including the ability to withdraw at any time without penalty. Participants were given a time to review the informed consent document and ask questions before signing to ensure that they are fully informed and comfortable with their decision to participate in the study.

Data will be collected and stored using secure, encrypted systems with identifiable information separated from research data. The participants were assigned unique identification numbers to further safeguard their privacy. Access to the data were restricted to the researcher directly involved in the study. Additionally, the Palawan State University Research Ethics Review Committee may have an access to the data if needed. The data were archived for five years following the study completion, allowing to adequate analysis and potential follow-up studies. After this period, all data were securely disposed by

the researcher, electronic files were permanently deleted and physical records will be shredded to ensure that no identifiable information remains.

In conducting this research, participants may experience discomfort or emotional distress when discussing sensitive topics, disclosing sensitive information, and fear being stigmatized for sharing their experiences. To protect participants informed consent were given prior to the study along with confidentiality measures. Mitigating strategies to reduce potential risk are trained interviewers who can handle sensitive topics with care provide immediate support to the participants and offer debriefing sessions.

Chapter IV
PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA
This chapter provides a thorough look at the statistical data gathered to answer the research questions. It presents, analyzes, and explained the findings clearly. The results of the statistical tests are also carefully reviewed and discussed.

Respondents' Demographic Profile
The following tables show the distribution of the selected mothers from the three barangays of Bataraza, Palawan who participated in this study. The data encompass essential variables, including age, marital status, educational attainment, employment status, household income, number of pregnancies, and type of delivery. Descriptive statistics such as frequency distributions, percentages, and rankings have been employed to effectively convey the collected statistical information.

Table 4.1
Respondents' Demographic Profiles in terms of Age

Respondents' Age	Frequency (f)	Percentage (%)	Rank
15 – 20 years old	38	21.47	2nd
21 – 25 years old	52	29.38	1st
26 – 30 years old	32	18.08	3rd
31 – 35 years old	31	17.51	4th
36 – 40 years old	24	13.56	5th
TOTAL	**177**	**100.00**	

Table 4.1 depicts the demographic profile of the selected mothers who participated in this study in terms of age. The analysis revealed that most respondents fall within the age range of 21 to 25 years, including 29.38% of the total sample. This age group is followed by those aged 15 to 20 years at 21.47%, indicating that a substantial portion of the mothers are relatively young and may be experiencing motherhood for the first time. The subsequent age groups, 26 to 30 years (18.08%), 31 to 35 years (17.51%), and 36 to 40 years (13.56%), show a gradual decline in frequency, suggesting that younger mothers are more prevalent in this sample.

The results imply that younger mothers, may face heightened vulnerability to postpartum depression due to lack of emotional maturity and life experience that can help them navigate the challenges of new motherhood. This coincides with Smorti et al. (2019), who posited that first-time mothers are at a higher

risk for developing postpartum depression because of maternal inexperience that can lead to difficulties in early interactions with their infants, which can exacerbate feelings of inadequacy and depression. Additionally, the stress of balancing motherhood with other responsibilities, such as education or early career development, can further contribute to mental health challenges during the postpartum period. This finding aligns with research by Artazcoz (2020), who emphasized that the multifaceted demands of juggling motherhood with other commitments can significantly contribute to increased stress levels and a high chance of developing postpartum depression. Hence, the pressure to meet societal expectations, coupled with the physical and emotional demands in taking care of the newborn, may create a perfect storm for mental health vulnerabilities in this demographic. This result suggests that providing adequate support systems and resources for young mothers could mitigate some of the risks associated with postpartum depression.

This implies nurses to do screening for postpartum depression particularly ages 21-25 years old to identify at risk individuals. Educational programs focusing on maternal health, coping strategies and infant care in order to empower women. Nurses should promotes also the access on mental health program funded by the government and ensure family members included in educational programs for better support young mothers.

Table 4.2
Respondents' Demographic Profiles in terms of Marital Status

Respondents' Marital Status	Frequency (f)	Percentage (%)	Rank
Single	14	7.90	3rd
Married	97	54.80	1st
Common Law	65	36.70	2nd
Separated	1	0.60	4th
TOTAL	**177**	**100.00**	

The demographic profile of mothers with regards to marital status, as described by Table 4.2, reveals significant insights into the potential risks associated with postpartum depression. Based on the results of the analysis, most respondents are married (54.80%), followed by those in common law relationships (36.70%), with a small percentage being single (7.90%) and separated (0.60%). This distribution indicates that a substantial portion of the mothers are in stable relationships, which can provide a supportive environment during the postpartum period.

Marital status plays a crucial role in the mental health of new mothers. Research has consistently shown that women who are married or in stable relationships tend to have lower rates of postpartum depression compared to those who are single or separated. This is largely attributed to the emotional and practical support that partners can provide, which is essential during the challenging postpartum period. This is in consonance with Dimcea et al. (2024), who indicated that social support, including that from partners, significantly reduces the likelihood of developing postpartum depression. The results also conform with Hagatulah et al. (2024), who emphasized that single mothers may face increased stress due to the lack of a partner's support, which can heighten their vulnerability to depression.

Furthermore, the high percentage of mothers in common law relationships suggests that many women may not have the formal legal protections and societal support that marriage can provide. While these

relationships can still offer emotional support, the lack of legal recognition may contribute to feelings of instability and anxiety, potentially increasing the risk of postpartum depression. This corroborates with Cho et al. (2022), who have shown that relationship quality, rather than marital status alone, is a critical factor in predicting postpartum mental health outcomes. They further echoed that women in high-conflict relationships or those lacking adequate support from their partners are at a greater risk for developing postpartum depression.

Nursing implications indicate that assessing not only the marital status of postpartum mothers but also the quality of interpersonal relationships. It is important to educate on the importance of social support and facilitate referrals to support group, counseling services and community resources. By fostering supportive environment and advocating for comprehensive support system, this can reduce the incidence and impact among postpartum depression aprticulary mothers in less stable and unsupported relationship.

Table 4.3
Respondents' Demographic Profiles in terms of Educational Attainment

Respondents' Education Level	Frequency (f)	Percentage (%)	Rank
No Formal Education	8	4.50	6th
Elementary Graduate	31	17.50	3rd
High School Graduate	61	34.50	1st
Bachelor's Degree	47	26.60	2nd
Vocational Course	20	11.30	4th
Post Graduate Degree	10	5.60	5th
TOTAL	177	100.00	

Table 4.3 presents the educational attainment levels of the selected mothers, revealing a diverse range of backgrounds. It can be gleaned in the analysis that the largest segment of respondents are high school graduates (34.50%). This statistic suggests that a significant portion of the sample may have limited access to higher-paying employment opportunities and comprehensive health information, which may potentially increase stress and vulnerability to postpartum depression. Conversely, this data was followed by those with a bachelor's degree (26.60%) and elementary graduates (17.50%). Meanwhile, a smaller percentage of mothers have completed vocational courses (11.30%), postgraduate degrees (5.60%), and no formal education (4.50%). The results indicated that a notable proportion of mothers who are elementary graduates may face considerable socioeconomic challenges and limited access to healthcare and support systems, which may significantly increase their risk of postpartum depression.

Educational attainment is a critical factor influencing maternal mental health, particularly in relation to postpartum depression. Research has shown that lower levels of education are linked to higher rates of postpartum depression. This substantiates the findings of Darvill et al. (2018), who reported that mothers with limited education may face increased stress due to financial instability, lack of access to healthcare, and limited knowledge about maternal and infant health, all of which can contribute to the onset of depressive symptoms. This finding also reinforces the study of Guarnieri et al. (2014), who clarified that women with lower educational backgrounds often have less social support and fewer coping resources, making them more susceptible to mental health issues following childbirth. This highlights the

importance of education in mitigating mental health risks during the postpartum period. Hence, this suggests that through providing targeted support and resources for mothers with lower educational levels, healthcare providers can help mitigate the associated risks and promote better mental health outcomes for both mothers and their infants.

Nursing implications indicates that nurses should recognize or identify the educational status of mothers such as high school and elementary graduates, may be at risk due to limited access in health information, financial constraints and reduced coping skills. This calls for a more tailored, simple language, clear and culturally sensitive materials to ensure better understanding. Nurses needs to assess the educational background during pre-natal and post-natal visits, and provide targeted interventions including referral to social services, community programs and support networks.

Table 4.4
Respondents' Demographic Profiles in terms of Employment Status

Respondents' Employment	Frequency (f)	Percentage (%)	Rank
Employed	55	31.10	2nd
Unemployed	113	63.80	1st
Self-Employed	9	5.10	3rd
TOTAL	**177**	**100.00**	

Table 4.4 examines the employment status of the selected mothers who participated in this study. The analysis revealed that a significant majority of the respondents are unemployed (63.80%), followed by those who are employed (31.10%) and a small percentage who are self-employed (5.10%). This distribution indicates that a considerable number of mothers may be facing economic challenges, which can have profound implications for their mental health, particularly in relation to postpartum depression. The aforementioned finding reinforces the findings of Yusuff et al. (2024), who argued that unemployment is a significant risk factor for postpartum depression, as it can lead to increased financial stress, feelings of inadequacy, and social isolation. This implies that women who are unemployed during the postpartum period are more likely to experience depressive symptoms due to the stress associated with financial instability and lack of support.

Moreover, the high percentage of unemployed mothers suggests that many may lack access to essential resources, including healthcare, which can exacerbate the risk of developing depression. This underscores that unemployment can also limit social interactions and support networks, further isolating these mothers during a critical time. Conversely, the employed mothers, while still at risk, may have better access to healthcare benefits and social support, which can serve as protective factors against postpartum depression. However, the demands of balancing work and motherhood can also contribute to stress, indicating that even employed mothers are not immune to the risks associated with postpartum depression.

The implications of this study suggest that healthcare workers specifically nurses must be attentive to the heightened vulnerability of unemployed mothers who face financial hardships, limited access to mental health and reduced social support. During prenatal and postnatal care, Nurses should identify the employment status of mothers as part of comprehensive psychosocial evaluation and identify the risk

due to unemployment status. It is essential to provide mothers support in terms of financial referral or financial assistance programs and community-based resources.

Table 4.5
Respondents' Demographic Profiles in terms of Gross Monthly Income

Respondents' Income	Frequency (f)	Percentage (%)	Rank
P10,000.00 and below	108	61.02	1st
P10,001.00 – P20,000.00	36	20.34	2nd
P20,001.00 – P30,000.00	11	6.21	4th
P30,001.00 – P40,000.00	13	7.34	3rd
P40,001.00 and above	9	5.08	5th
TOTAL	177	100.00	

Table 4.5 indicates the distribution of the gross monthly income of the selected mothers. The results revealed that a significant majority (61.02%) earn P10,000.00 and below, making this the largest income group. This is followed by those earning between P10,001.00 and P20,000.00 (20.34%), while smaller percentages fall into the higher income brackets: P20,001.00 to P30,000.00 (6.21%), P30,001.00 to P40,000.00 (7.34%), and P40,001.00 and above (5.08%). The statistic highlights that the predominance of mothers in the lowest income bracket indicates a concerning trend that may have serious implications for their mental health, particularly regarding postpartum depression. This implies that the predominance of mothers with low income may face challenges such as limited access to healthcare services, inadequate nutrition, and insufficient social support, all of which can contribute to the onset of postpartum depression.

Research has consistently shown that lower income levels are associated with higher rates of postpartum depression. This finding strengthens the study of Amer et al. (2024), who posited that financial stress may exacerbate feelings of inadequacy and helplessness, which are significant risk factors for developing depressive symptoms after childbirth. This also coincides with Martín-Gómez et al. (2020), who noted women with lower household incomes often experience increased stress due to financial instability, which can lead to higher incidences of depression.

Moreover, the relatively small percentage of mothers in higher income brackets suggests that those with better financial stability may have access to more resources, including mental health services and social support networks, which can serve as protective factors against postpartum depression. However, the fact that only a small number of mothers earn above P20,000.00 indicates that many of the mothers who participated in this study are living in conditions that may not support their mental well-being. Thus, this suggests that addressing the economic challenges faced by these mothers through targeted interventions, such as financial assistance programs, access to mental health resources, and community support initiatives, could be vital in reducing the risk of postpartum depression.

This findings has nursing implication in terms of recognizing mothers with lower income levels are at risk of developing PPD. As part of holistic maternal care nurse should incorporate routine assessment of economic status into their psychosocial evaluations and be vigilant in identifying signs of financial hardships. It is important to provide education about availability of community resources such as government financial aid, nutritional support program and affordable mental health services. Lastly

nurses should collaborate with social worker s and community organizations to develop support network.

Table 4.6
Respondents' Demographic Profiles in terms of Number of Pregnancies

Respondents' Parity	Frequency (f)	Percentage (%)	Rank
1 – 2 pregnancies	124	70.10	1st
3 – 4 pregnancies	43	24.30	2nd
5 – 6 pregnancies	8	4.50	3rd
7 and above pregnancies	2	1.20	4th
TOTAL	177	100.00	

Table 4.6 illustrates the demographic profiles of the selected mothers in terms of the number of pregnancies. The results revealed that a significant majority (70.10%) have experienced 1 to 2 pregnancies. This is followed by those with 3 to 4 pregnancies (24.30%), while only a small percentage have had 5 to 6 pregnancies (4.50%) and 7 or more pregnancies (1.20%). The statistic highlighting the predominance of mothers with 1 to 2 pregnancies suggests that many are likely first-time mothers or have limited experience with childbirth, which can have important implications for their mental health, particularly regarding postpartum depression. Contrariwise, mothers with 3 to 4 pregnancies, while more experienced, may still face significant stressors, particularly if they are managing multiple children and the associated demands of parenting.

The aforementioned results suggest that first-time mothers may report higher levels of depressive symptoms compared to those who had previously given birth, highlighting the emotional vulnerability associated with being a new parent. This was underscored by Mazzeschi et al. (2015), who noted that first-time mothers are at a higher risk for developing postpartum depression due to the stress and anxiety associated with the transition to motherhood. The lack of experience can lead to feelings of inadequacy and overwhelm, especially when faced with the challenges of caring for a newborn. Meanwhile, this validates the findings of Smorti et al. (2019), who argued that the cumulative stress of multiple pregnancies and the potential for financial and emotional strain can contribute to an increased risk of postpartum depression. They further underscored that higher parity can be associated with increased maternal fatigue and stress, which can exacerbate depressive symptoms.

This study implies that nurses should recognize that mothers with 1 to 2 pregnancies, especially the first time mothers are be more emotional unstable due to inexperience, heightened anxiety and uncertainty about newborn care.

Table 4.7
Respondents' Demographic Profiles in terms of Type of Delivery

Respondents' Type of Delivery	Frequency (f)	Percentage (%)	Rank
Normal Delivery	149	84.20	1st
Cesarian Section	28	15.80	2nd
TOTAL	177	100.00	

Table 4.7 presents the demographic profiles of the selected mothers based on the type of delivery, indicating that a substantial majority (84.20%) of the mothers delivered vaginally, whereas a smaller proportion (15.80%) underwent cesarean sections. This distribution highlights a significant preference or trend towards vaginal deliveries among the respondents, which can have important implications for maternal mental health, particularly concerning postpartum depression. The results of the analysis highlight that the type of delivery may influence the risk of developing depression among mothers. This underscores that the emotional impact of the delivery method can also be compounded by the circumstances leading to a cesarean section, such as emergency situations or complications during labor. These experiences can heighten stress and anxiety, further increasing the likelihood of developing postpartum depression.

The aforementioned findings are parallel with Smorti et al (2019), who echoed that vaginal delivery is often associated with a more positive postpartum experience, as it typically allows for immediate skin-to-skin contact and bonding with the newborn, which can enhance maternal satisfaction and reduce feelings of depression. They further echoed that contrarily, mothers who undergo cesarean sections may experience a more complicated recovery process, which can contribute to an increased risk of postpartum depression. This confirms with the study Fiala et al. (2017), who indicated that women who had cesarean deliveries reported higher levels of depressive symptoms compared to those who had vaginal births, potentially due to the emotional and physical challenges associated with surgical recovery.

The findings in this table have nursing significant implications in relation to postpartum mental health. Nurses must be aware that mothers who undergo cesarean section s may face an elevated risk due to physical demands of surgical recovery and delayed mother-infant bonding. These mothers needs more emotional support pain management and encouragement in forming early connection with their infant. For mothers who delivers vaginally, nurses should still monitor for signs of depression while also reinforcing positive postpartum experience.

Risk Factors Associated with High Postpartum Depression

The following tables present an analysis of risk factors for postpartum depression (PPD) among mothers identified as high-risk based on their scores on the Edinburgh Postnatal Depression Scale (EPDS). The analysis examines four categories of potential risk factors: (a) obstetric status, (b) psychosocial factors, (c) lifestyle factors, and (d) psychological characteristics. The mean EPDS core was calculated for each level of each risk factor to identify associations with increased likelihood of PPD.

Table 4.8
Risk Factors Associated with High Postpartum Depression
In terms of Obstetric Status

Indicator	Mean	Descriptor
1.I feel sad or hopeless since giving birth.	2.15	Disagree
2.I feel often overwhelmed by the responsibilities as a new parent.	3.02	Agree
3.I have considered seeking professional help for my feelings.	2.28	Disagree
4.I have lost interest in activities I used to enjoy.	2.44	Disagree

5.I feel anxious about my ability to care for my baby.	2.46	Disagree
6.I have experienced changes in my appetite or sleep patterns.	2.80	Agree
*7.I feel supported by my family and friends during this time.***	3.24	Agree
8.I find it difficult to connect emotionally with my baby.	2.14	Disagree
9.I often feel fatigue or lack of energy throughout the day.	2.68	Agree
10. I believe that my mental health is negatively affecting my parenting.	2.62	Agree
Overall Mean Rating	**2.51**	**Moderate Depression**

Legend for the Mean Rating: *Strongly Disagree: 1.00 – 1.74; Disagree: 1.75 – 2.49; Agree: 2.50 – 3.24; Strongly Agree: 3.25 – 4.00*

Legend for the Overall Mean Rating: *No Depression: 1.00 – 1.74; Low Depression: 1.75 – 2.49; Moderate Depression: 2.50 – 3.24; High Depression: 3.25 – 4.00*

Table 4.8 presents an analysis of risk factors associated with postpartum depression in terms of obstetric status, revealing insights into the emotional and psychological challenges faced by new parents. Based on the results of the analysis, the statement with the highest mean rating is "I feel supported by my family and friends during this time," with a score of 3.24. This finding underscores the importance of social support in mitigating feelings of depression among new parents. This coincides with Carlson et al. (2025), who highlighted that strong social support networks can safeguard against the onset of postpartum depression. This implies that fostering supportive relationships can play a crucial role in promoting mental health for new mothers.

Following this, the statement "I feel often overwhelmed by the responsibilities as a new parent" received a mean rating of 3.02. This suggests that despite the support provided by family and friends, many new parents feel significant stress related to their new roles. This corroborates with Wang et al. (2021), who echoed that the overwhelming nature of parenting responsibilities is a well-documented risk factor for postpartum depression as it can lead to feelings of inadequacy and anxiety about parenting abilities.

In the same vein, the next highest mean rating is for the statement "I have experienced changes in my appetite or sleep patterns," which scored 2.80. This data suggests that a significant proportion of the respondents is experiencing disturbances in basic physiological functions related to appetite and sleep. This highlights the widespread impact of the postpartum period on women's physical well-being, even beyond emotional and psychological factors. This was underscored by Smorti et al (2019) who posited that changes in appetite and sleep are common symptoms of postpartum depression and can exacerbate feelings of fatigue and emotional distress. This finding highlights the need for healthcare providers to monitor these symptoms closely and offer strategies to help new parents manage their sleep and dietary habits, which are critical for both physical and mental health.

Conversely, it is worth noting that the respondents generally disagreed with the statement "I find it difficult to connect emotionally with my baby," yielding a mean rating of 2.14. This suggests that, despite the challenges of the postpartum period, the majority of mothers in this sample felt a positive emotional bond with their infants, which is a critical indicator of healthy maternal attachment. This finding is particularly encouraging, as strong maternal-infant attachment is associated with numerous positive outcomes for both mother and child, including improved infant socio-emotional development, reduced risk of child behavioral problems, and enhanced maternal well-being (Bowlby, 2019).

Furthermore, the overall mean depression rating of 2.51 suggests that, on average, the respondents experienced a moderate level of depressive symptoms. This finding is particularly noteworthy as it indicates that a substantial portion of the mothers who participated in this was experiencing more than just sudden feelings of sadness or low mood. Likewise, the moderate level of depression implies that these symptoms were likely impacting their daily lives, potentially affecting their ability to care for themselves and their infants, manage household responsibilities, and maintain social connections.

The implications of this study suggest that healthcare workers such as nursesmust recognize the critical protective role of social support. This highlight that need of nurses to assess the presence and quality of a mothers support and to encourage family and friends in postpartum care. Also nurses should educated mothers about the common physiological impacts of postpartum depression and implement routine screenings for enabled early intervention.

Table 4.9
Risk Factors Associated with High Postpartum Depression
In terms of Psychosocial

Indicator	Mean	Descriptor
1. I feel that my emotional needs are being met during this time.	2.92	Agree
2. I have a strong support system (family, friends) to rely on.	3.37	Strongly Agree
3. I feel isolated from others since giving birth. *	2.35	Disagree
4. I can communicate my feelings and needs effectively.	3.07	Agree
5. I feel confident in my parenting abilities.	3.24	Agree
6. I experience feelings of anxiety or stress related to parenting. *	2.60	Agree
7. I have access to mental health resources if needed.	3.14	Agree
8. I feel that my partner is supportive of my needs.	3.62	Strongly Agree
9. I have a sense of purpose and fulfillment since becoming a parent.	3.41	Strongly Agree
10. I often feel overwhelmed by my responsibilities as a new parent.*	2.41	Agree
Overall Mean Rating	**2.44**	**Low Depression**

Legend for the Mean Rating: *Strongly Disagree: 1.00 – 1.74; Disagree: 1.75 – 2.49; Agree: 2.50 – 3.24; Strongly Agree: 3.25 – 4.00*

Legend for the Overall Mean Rating: *No Depression: 1.00 – 1.74; Low Depression: 1.75 – 2.49; Moderate Depression: 2.50 – 3.24; High Depression: 3.25 – 4.00*

The analysis of the risk factors associated with high postpartum depression, as indicated by the psychosocial indicators in Table 4.9, reveals several important insights into the emotional and social dynamics experienced by new mothers. The results indicated that the statement "I feel that my partner is supportive of my needs" yielded the highest mean rating of 3.62. This data indicates that many respondents feel their partners provide significant emotional support. This strong sense of partnership is

crucial, as research has shown that supportive relationships can mitigate the risk of postpartum depression by enhancing emotional well-being and reducing feelings of isolation (Ponti et al., 2020). This suggests that the presence of a supportive partner can foster a nurturing environment, which is essential for both maternal mental health and child development.

Subsequently, the statement, "I have a strong support system (family, friends) to rely on" obtained a mean of 3.37. This finding emphasizes the importance of social support in reducing postpartum depression risk. This supports with Moradi et al. (2025), who have shown that women with strong social networks are less likely to experience depressive symptoms postpartum, as these networks provide emotional and practical assistance during a challenging transition. Further, it is also worth noting that there is a strong consensus among respondents with regard to the statement, "I have a sense of purpose and fulfillment since becoming a parent", with a mean rating of 3.41. The data also revealed that the respondents reported a strong sense of purpose and fulfillment, which can serve as a protective factor against depression. This conforms with Fiala et al. (2017), who demonstrated that positive feelings about motherhood can enhance resilience and coping strategies, thereby reducing the likelihood of developing postpartum depression. Notably, the results also revealed disagreement with the statement, "I feel isolated from others since giving birth", with a mean rating of 2.35. Interestingly, this lowest mean rating indicates that most respondents do not feel isolated. This finding is encouraging, as social isolation is a significant risk factor for postpartum depression. However, it also suggests that some mothers may still experience feelings of loneliness, which should be addressed through community support initiatives.

Overall, the mean rating of 2.44 indicates that the mothers who participated in this study exhibited a low level of depression. This suggests that while these mothers may have experienced some depressive symptoms, such as occasional sadness or fatigue, the severity was generally mild and likely did not significantly impair their daily functioning or ability to care for their infants. However, it's important to acknowledge that even a "low" level of depression can impact well-being and should not be dismissed. Continued monitoring and access to supportive resources remain crucial for these mothers to prevent potential escalation to more severe depressive states and to promote optimal mental health during the postpartum period. The implications of this to nurses is to assess presence and quality of these supports systems and provide encouragement to sustain and strengthen them.

Table 4.10
Risk Factors Associated with High Postpartum Depression
In terms of Lifestyle

Indicator	Mean	Descriptor
1. I have maintained my balance diet since giving birth.	2.66	Agree
2. I engage in regular physical activity or exercise.	2.42	Disagree
3. I get an adequate sleep each night.	2.45	Disagree
4. I feel I have enough time for self-care and relaxation.	2.66	Agree
5. I have maintained social interactions with friends and family.	3.00	Agree
6. I often feel fatigued or drained throughout the day.*	2.98	Agree
7. I engage in activities that I enjoy or find fulfilling.	2.58	Agree
8. I feel that my lifestyle choices positively impact my mental	2.88	Agree

health.		
*9. I find challenging to manage my time effectively.**	2.61	Agree
*10.I often feel stressed or anxious about my daily routine. ***	2.69	Agree
Overall Mean Rating	**2.26**	**Moderate Depression**

Legend for the Mean Rating: *Strongly Disagree: 1.00 – 1.74; Disagree: 1.75 – 2.49; Agree: 2.50 – 3.24; Strongly Agree: 3.25 – 4.00*

Legend for the Overall Mean Rating: *No Depression: 1.00 – 1.74; Low Depression: 1.75 – 2.49; Moderate Depression: 2.50 – 3.24; High Depression: 3.25 – 4.00*

Table 4.10 analyzes the lifestyle indicators associated with postpartum depression among the mothers who participated in this study. The data reveals that the statement, "I maintain social interactions with friends and family" received the highest mean rating at 3.00, indicating agreement. This underscores the critical role of social support in the postpartum period, suggesting that mothers who maintain connections with their social networks experience a protective effect against depressive symptoms. This supports the findings of Escriba et al (2010), who underscored that strong social support systems provide emotional and practical assistance, reducing feelings of isolation and enhancing overall well-being.

Meanwhile, the analysis also revealed a consensus among respondents regarding the statement, "I often feel fatigued or drained throughout the day," which received a mean rating of 2.98. This high rating underscores a prevalent and significant challenge faced by new mothers during the postpartum period. Fatigue is a common experience for many women after childbirth, primarily due to the combined effects of sleep deprivation and the demanding responsibilities of caring for a newborn. This validated the study of Salk et al. (2017), who argued that new mothers often experience disrupted sleep patterns, which can lead to chronic fatigue. The need for nocturnal infant care significantly impacts sleep efficiency, resulting in mothers spending long hours in bed but achieving little restorative sleep. This lack of quality sleep can contribute to feelings of exhaustion and can exacerbate other emotional challenges, including anxiety and depression.

Interestingly, the consensus among respondents, indicated by a mean rating of 2.88 for the statement "I feel that my lifestyle choices positively impact my mental health," reveals a significant awareness among mothers regarding the connection between their daily habits and their emotional well-being. This awareness serves as a powerful motivator for positive change, encouraging mothers to prioritize self-care activities such as regular physical exercise, a balanced diet, and adequate sleep. This observation aligns with the findings of Carlson et al. (2025), who asserted a significant association between lifestyle factors—specifically diet and physical activity—and mental health outcomes. Their research indicated that consistent physical activity, can lead to improved mental well-being and a reduction in symptoms of anxiety and depression among postpartum women.

Furthermore, the study also revealed a low overall mean depression rating of 2.26 among respondents, suggesting a generally low level of depressive symptoms within the sample. However, the analysis underscored that understanding the link between lifestyle choices and mental health also empowers mothers to take control of their well-being, leading to proactive behaviors such as participating in health education programs focused on mental health and wellness strategies, which studies indicate can significantly improve mental health outcomes. This indicates that the positive impact of these lifestyle choices extends beyond the postpartum period, establishing healthy habits early on and leading to

sustained mental well-being, thereby reducing the risk of developing more severe mental health issues in the future.

Nurses need to educate new mothers on effective rest strategies, safe sleep practices for infants and shared caregiving responsibilities to alleviate exhaustion. Nurses should advocate for the inclusion of rest and recovery plan in postpartum care and involved family members or partners in these discussions to ensure shared support.

Table 4.11
Risk Factors Associated with High Postpartum Depression
In terms of Psychological

Indicator	Mean	Descriptor
1. I often feel anxious about my ability to care for my baby.	2.40	Disagree
2. I experience feelings of sadness or hopelessness regularly.	2.41	Disagree
3. I find it difficult to cope with the changes in my life.	2.49	Disagree
4. I have a positive outlook on my future as a parent.	3.28	Strongly Agree
5. I feel overwhelmed by my emotions since giving birth.	2.98	Agree
6. I often doubt my parenting decisions.	2.40	Disagree
7. I feel a strong bond with my baby.	3.36	Strongly Agree
8. I am able to express my feelings openly to others.	2.95	Agree
9. I feel comfortable seeking help for my mental health if needed.	3.21	Agree
10. I often feel irritable or easily frustrate	2.87	Agree
Overall Mean Rating	**2.72**	**Moderate Depression**

Legend for the Mean Rating: *Strongly Disagree: 1.00 – 1.74; Disagree: 1.75 – 2.49; Agree: 2.50 – 3.24; Strongly Agree: 3.25 – 4.00*

Legend for the Overall Mean Rating: *No Depression: 1.00 – 1.74; Low Depression: 1.75 – 2.49; Moderate Depression: 2.50 – 3.24; High Depression: 3.25 – 4.00*

Table 4.11 presents risk factors associated with high postpartum depression, focusing on psychological indicators. As depicted by the analysis, the highest mean rating of 3.36 was obtained by the statement "I feel a strong bond with my baby." This indicates that, despite the existence of some depressive symptoms within the sample, a strong sense of attachment to their infants is prevalent among these mothers. This implies that a strong maternal-infant bond is a crucial resilience factor that can buffer against the negative effects of postpartum depression. Added to thus, this bond fosters feelings of love, connection, and purpose, which can help mothers cope with stress and manage their emotions. Furthermore, the presence of this bond suggests an inherent strength within the population that can be leveraged in interventions. This finding aligns with Harasawa et al. (2025), who denoted that postpartum depression and mother-to-infant bonding difficulties often coexist and affect each other. They further echoed that mother-to-infant bonding can mitigate depressive symptoms.

It is worth mentioning that the respondents strongly agreed with the statement, "I have a positive outlook on my future as a parent," with a mean rating of 3.28. This implies that this positive outlook can serve as

a protective factor against depression. Research supports the idea that a hopeful and optimistic perspective regarding parenting can significantly influence mental health outcomes for parents. This finding validates the study of Rothwell and Davoodi (2024), who echoed that parents who maintain a positive outlook on their parenting journey are less likely to experience depressive symptoms. This optimism can enhance resilience, allowing parents to cope better with stressors associated with raising children.

Notably, it is quite alarming that the results revealed a consensus among respondents to the statement "I feel overwhelmed by my emotions since giving birth", with a mean rating of 2.98. This suggests that despite the positive outlook manifested by the mothers, feeling overwhelmed is still a common experience. This highlights the need for education and support related to emotional regulation. Interventions should focus on teaching coping skills for managing stress, anxiety, and other overwhelming emotions. This finding is in consonance with Guarnieri et al. (2014), who echoed that many mothers are grappling with intense emotions post-birth, which can include feelings of sadness, anxiety, and frustration. This emotional overwhelm can be exacerbated by the challenges of adjusting to motherhood, such as sleep deprivation, changes in family dynamics, and the pressures of caregiving.

This implicate in nursing by reinforcing and build upon these strengthens by fostering opportunities for bonding through skin-to-skin contact, breastfeeding support and encouraging meaningful mother-infant interaction during postpartum visits. Nurses role in this result is by recognizing early psychological distress, supporting positive maternal infant bonds, and guiding mothers toward emotional resilience.

Relationship Between the Respondents' Demographic Profiles and the Risk Factor Associated with Postpartum Depression

The following table shows a complete analysis of the relationship between the demographic profiles of selected mothers, and risk factors associated with postpartum depression. In order to evaluate this relationship, the Chi-square test of independence was applied. This method is particularly effective in examining This statistical method is particularly effective for examining the association between categorical variables. It allows us to determine whether there is a statistically significant relationship between mothers' demographic characteristics—such as age, marital status, educational attainment, employment status, household income, number of pregnancies, and type of delivery—and the presence of risk factors linked to postpartum depression.

Table 4.12
Relationship Between Profiles and Risks Associated with Postpartum Depression

Profile	p-value	Interpretation
Age	0.0006**	Significant
Marital Status	0.0018**	Significant
Educational Attainment	0.0073**	Significant
Employment Status	0.0205**	Significant
Monthly Income	0.0045**	Significant
Number of Pregnancies	0.0293**	Significant
Type of Delivery	0.0634	Not Significant

Legend for p-value: *Significant at 0.05 level of significance*

Table 4.12 presents a breakdown examining the relationship between various demographic profiles of mothers and the risk of postpartum depression. The results indicate statistically significant relationships for age (p=0.0006), marital status (p=0.0018), educational attainment (p=0.0073), employment status (p=0.0205), monthly income (p=0.0045), and number of pregnancies (p=0.0293). Meanwhile, the type of delivery (p=0.0634) was not found to be significantly associated with postpartum depression risk.

The significant p-value suggests that a mother's age is related to her risk of experiencing postpartum depression. This could mean that younger mothers or older mothers, relative to a certain age range, are at a higher risk. This implies that younger mothers may face increased social and economic challenges, while older mothers may experience more pregnancy-related complications, both contributing to heightened risk. The results of this study conform with Smorti et al. (2019), who echoed that first-time mothers are at a higher risk for developing postpartum depression because of maternal inexperience that can lead to difficulties in early interactions with their infants, which can exacerbate feelings of inadequacy and depression. This suggests that interventions should be age-sensitive, providing targeted support for younger mothers who may need assistance with childcare and financial stability, and for older mothers who may require additional medical and psychological support.

Similarly, marital status shows a significant relationship with postpartum depression risk. This likely indicates that single mothers or those without strong social support from a partner are at higher risk. This implies that social support is a crucial protective factor against postpartum depression, and the absence of a supportive partner can increase vulnerability. This suggests that support programs should focus on providing resources and social connections for unmarried mothers, such as parenting groups, counseling, and access to childcare assistance. This is parallel with Dimcea et al. (2024), who indicated that social support, including that from partners, significantly reduces the likelihood of developing postpartum depression

Accordingly, educational attainment is significantly associated with postpartum depression risk. Mothers with lower levels of education may face increased financial strain, limited access to healthcare, and reduced awareness of mental health resources, all of which can contribute to higher risk. This emphasizes that higher education levels are associated with better health literacy and access to support systems. Thus, this study suggests that public health initiatives should target mothers with lower educational attainment, providing them with accessible information about postpartum depression, mental health services, and resources for financial and social support. This verifies the findings of Darvill et al. (2018), who reported that mothers with limited education may face increased stress due to financial instability, lack of access to healthcare, and limited knowledge about maternal and infant health, all of which can contribute to the onset of depressive symptoms. This finding also strengthens Guarnieri et al. (2014), who clarified that women with lower educational backgrounds often have less social support and fewer coping resources, making them more susceptible to mental health issues following childbirth.

Correspondingly, the employment status is significantly related to postpartum depression risk. This could mean that unemployed mothers or those facing job-related stress are at higher risk. This suggests that financial instability and lack of social interaction in the workplace can contribute to increased stress and depression. This underscores that support programs should address the needs of unemployed mothers by providing job training, financial assistance, and access to affordable childcare. Meanwhile, Ffor employed mothers, workplace policies that support work-life balance and provide mental health resources are essential. This supports the findings of Yusuff et al. (2024), who claimed that

unemployment is a significant risk factor for postpartum depression, as it can lead to increased financial stress, feelings of inadequacy, and social isolation.

Notably, monthly income demonstrates a significant relationship with postpartum depression risk. Lower income levels are often associated with increased stress, limited access to healthcare, and inadequate resources for childcare, all of which can elevate the risk of postpartum depression. This shows that financial strain is a major predictor of mental health issues in new mothers. This coincides with Martín-Gómez et al. (2020), who noted women with lower household incomes often experience increased stress due to financial instability, which can lead to higher incidences of depression.

In addition, the analysis also revealed that the number of pregnancies is significantly associated with postpartum depression risk. This shows that mothers with multiple pregnancies may experience increased physical and emotional strain, as well as greater demands on their time and resources, potentially increasing their risk. The results of this study support the study of Mazzeschi et al. (2015), who noted that first-time mothers are at a higher risk for developing postpartum depression due to the stress and anxiety associated with the transition to motherhood.

Contrarily, the type of delivery (vaginal vs. cesarean) does not show a significant relationship with postpartum depression risk in this analysis. While some studies have suggested a link between cesarean delivery and increased risk of postpartum depression due to surgical recovery and emotional factors, this analysis does not support that conclusion. The aforementioned findings contradict with Smorti et al (2019), who echoed that vaginal delivery is often associated with a more positive postpartum experience, as it typically allows for immediate skin-to-skin contact and bonding with the newborn, which can enhance maternal satisfaction and reduce feelings of depression. They further echoed that contrarily, mothers who undergo cesarean sections may experience a more complicated recovery process, which can contribute to an increased risk of postpartum depression. This also invalidates the study Fiala et al. (2017), who indicated that women who had cesarean deliveries reported higher levels of depressive symptoms compared to those who had vaginal births, potentially due to the emotional and physical challenges associated with surgical recovery.

The findings highlight's the need for nurses to implement targeted interventions based on mothers demographic profiles. Younger, less educated, single, unemployed or low income mothers should be prioritized for mental health screening and support. Nurses should provide education on postpartum depression, link mothers to counseling and support services and advocate for accessible community resources. Additionally multiparous mother should monitored for stress and fatigue. While type of delivery is not significant factor, all mothers should still receive holistic care to promote emotional well being during postpartum period.

CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the findings, outlines the conclusions from the study, suggests recommendations for future research, and includes a plan for sharing the discussion.

This study aimed to identify the risk factors associated with postpartum depression, focusing on several key areas: (a) obstetric status, (b) psychosocial factors, and (c) lifestyle choices. Additionally, the research explored the relationship between the respondents' demographic profiles—including age, sex, civil status, highest level of education, monthly income, employment status, number of pregnancies, and type of delivery—and the risk factors linked to postpartum depression.

The analysis was conducted using answers from 177 purposefully selected mothers from three barangays in Bataraza, Palawan. Data collection involved administering a investigator-designed questionnaire, which was structured into two comprehensive sections. The first section gathered information on the demographic profiles of the participants, while the second section included a 40-item Likert scale designed to assess various risk factors associated with postpartum depression.

To address the research questions, descriptive statistics were employed, including frequency, percentage, and ranking, to outline the socio-demographic characteristics of the respondents. Means were calculated to evaluate the risk factors associated with postpartum depression. Furthermore, the Chi-square test of independence was utilized to analyze the relationships between the demographic profiles and the identified risk factors. All inferential analyses were conducted at a 0.05 level of significance, ensuring that the findings were statistically robust.

Summary of Findings.

Respondents' Demographics Profiles

- **Age.** The analysis revealed that the majority of respondents are aged 21 to 25 years, comprising 29.38% of the total sample, followed by 21.47% in the 15 to 20 age group. This indicates a significant presence of relatively young mothers, many likely experiencing motherhood for the first time. Such youthfulness can heighten vulnerability to postpartum depression, as younger mothers may lack the emotional maturity and life experience needed to navigate the challenges of new motherhood. The stress of balancing early motherhood with educational or career aspirations can also exacerbate mental health issues. This finding underscores the necessity for targeted support systems to assist young mothers in managing their emotional health during this critical transition.

- **Marital Status**. The majority of mothers in the study are married (54.80%), followed by those in common law relationships (36.70%). This suggests that a stable partnership can provide essential emotional and practical support during the postpartum period. Research indicates that women in stable relationships generally experience lower rates of postpartum depression, largely due to the support partners can offer. However, the presence of mothers in common law relationships raises concerns about potential instability and anxiety due to the lack of legal recognition. This highlights the importance of ensuring that all mothers, regardless of marital status, have access to adequate support systems to mitigate the risk of postpartum depression.

- **Educational Attainment**. The educational attainment of respondents shows that 34.50% are high school graduates, with a significant portion lacking access to higher education. This limited educational background may restrict their employment opportunities and access to comprehensive health information, increasing vulnerability to postpartum depression. Lower educational levels are consistently linked to higher rates of depression due to factors such as financial instability and limited social support. Therefore, initiatives aimed at improving educational access and providing targeted resources can help mitigate the associated mental health risks for mothers.

- **Employment Status**. The study found that 63.80% of mothers are unemployed, which may contribute to significant economic challenges and subsequent mental health implications. Unemployment is a recognized risk factor for postpartum depression, often leading to increased financial stress and feelings of inadequacy. The lack of employment can also limit social interactions and support networks, further isolating mothers during a crucial time. Conversely, while employed mothers may have better access to healthcare benefits, they still face pressures from balancing work and mother-

hood. This suggests that addressing unemployment through job training and support programs could be vital in alleviating mental health risks for these mothers.

- **Monthly Income.** A significant majority of mothers (61.02%) earn P10,000.00 and below, highlighting a concerning trend that correlates with mental health challenges, particularly postpartum depression. Lower income levels are associated with limited access to healthcare, inadequate nutrition, and insufficient support systems, all of which can exacerbate depressive symptoms. Research indicates that financial stress can intensify feelings of helplessness and inadequacy, increasing the likelihood of postpartum depression. This finding underscores the importance of implementing targeted financial assistance programs and community support initiatives to improve the economic conditions of these mothers, thereby enhancing their mental well-being.

- **Number of Pregnancies.** The data shows that 70.10% of respondents have experienced 1 to 2 pregnancies, indicating that many are first-time mothers or have limited experience with childbirth. First-time mothers often report higher levels of depressive symptoms due to the emotional stress associated with the transition to motherhood. While mothers with multiple pregnancies may be more experienced, they also face unique stressors, such as managing multiple children. This suggests that tailored support programs for both first-time and experienced mothers are essential to address their specific challenges and promote mental health during the postpartum period.

- **Type of Delivery.** The analysis indicates that 84.20% of mothers delivered vaginally, while 15.80% underwent cesarean sections. The preference for vaginal delivery may be linked to a more positive postpartum experience, fostering immediate bonding with the newborn. Conversely, mothers who have cesarean sections may face greater emotional and physical challenges during recovery, potentially increasing their risk for postpartum depression. This finding emphasizes the need for healthcare providers to offer comprehensive support and education regarding the implications of different delivery methods, ensuring that all mothers receive the necessary resources for mental health care following childbirth.

Risk Factors Associated with Postpartum Depression

- **Obstetric Status.** The analysis highlights the crucial role of social support in mitigating feelings of depression among new parents, suggesting that fostering supportive relationships is essential for maternal mental health. Many new parents reported feeling overwhelmed by their responsibilities, indicating a need for resources to help them manage these challenges effectively. Additionally, disturbances in basic physiological functions like appetite and sleep were common, exacerbating emotional distress. Most mothers felt a positive bond with their infants, which is a critical indicator of healthy attachment. Overall, the moderate level of depressive symptoms reported suggests that these experiences impact daily functioning and caregiving responsibilities.

- **Psychosocial Indicators**. The findings reveal that many respondents perceive strong emotional support from their partners, which is vital for reducing the risk of postpartum depression and fostering a nurturing environment. The importance of social support networks is further emphasized, as these systems help mitigate depressive symptoms. Many mothers expressed a sense of purpose and fulfillment in their new roles, contributing to their resilience. Notably, the majority did not feel isolated after giving birth, indicating healthy social connections. The overall low level of depression suggests that while some symptoms exist, they are generally mild and manageable.

- **Lifestyle Indicators.** The data indicates that maintaining social interactions is protective against depressive symptoms, emphasizing the importance of social support in the postpartum period. Fatigue was a prevalent challenge, largely attributed to sleep deprivation and the demands of caregiving. Respondents showed significant awareness of how their lifestyle choices impact mental health, which can motivate positive changes and self-care practices. The overall low level of depressive symptoms suggests that while some mothers experience mild symptoms, promoting healthy lifestyle choices is crucial for long-term mental well-being.

- **Psychological Indicators**. The analysis reveals a significant attachment to infants among mothers, serving as a resilience factor against postpartum depression. Many respondents expressed a positive outlook on their future as parents, which can protect against depressive symptoms. However, emotional overwhelm was also reported, indicating that many mothers grapple with intense feelings despite their optimism. These findings highlight the need for education and support focused on emotional regulation and coping strategies. Overall, the results underscore the interplay between emotional bonding, support systems, and the psychological challenges of motherhood, pointing to the necessity for comprehensive interventions to support new mothers effectively.

Conclusion

Based on the findings from this investigation, the following conclusion can be drawn:

- Younger mothers are at a heightened risk for postpartum depression, potentially due to social and economic challenges, as well as inexperience with motherhood. Older mothers may also face increased risks related to pregnancy complications. This suggests the need for age-sensitive interventions that provide targeted support for both younger and older mothers.

- Single mothers or those lacking strong social support from partners are more vulnerable to postpartum depression. This highlights the crucial role of social support networks in mitigating risks. Support programs should focus on providing resources and community connections for unmarried mothers, including parenting groups and counseling services.

- Lower educational levels are associated with a higher risk of postpartum depression, largely due to financial strain and limited access to healthcare and mental health resources. Public health initiatives should aim to improve health literacy and provide accessible support for mothers with lower educational backgrounds to reduce the risk of depressive symptoms.

- Unemployed mothers or those facing job-related stress experience a higher risk of postpartum depression due to financial instability and reduced social interaction. Support programs should provide job training, financial assistance, and affordable childcare. For employed mothers, workplace policies that promote work-life balance and mental health resources are essential.

- Lower income levels correlate with an increased risk of postpartum depression, as financial stress limits access to healthcare and adequate childcare resources. This underscores the importance of addressing economic challenges through financial support initiatives to improve mental health outcomes for new mothers.

- Mothers with multiple pregnancies face greater emotional and physical strains, which can elevate their risk of postpartum depression. First-time mothers are particularly vulnerable during the transition to motherhood, indicating a need for tailored support that addresses the unique challenges associated with varying numbers of pregnancies.

- The type of delivery (vaginal vs. cesarean) was not significantly associated with postpartum depression risk in this study. This finding suggests that factors other than the delivery method may play a more critical role in influencing maternal mental health, challenging previous research that linked cesarean deliveries with higher depressive symptoms.

Recommendations

After examination of the findings and conclusion of the study, the following are strongly recommended for the utilization of the results of this study.

- Healthcare practitioners such as nurses, midwifes and psychologist should develop and implement age-sensitive programs that address the unique challenges faced by younger and older mothers.

- Healthcare practitioners and nurses should also enhance social support networks through support groups and counseling services particularly for single mothers. They should also provide education and resources about postpartum depression to empower mothers to seek help.

- Postpartum mothers are encouraged to actively engage with family, friends, and support groups to build a strong network that offers emotional and practical assistance, while also prioritizing self-care practices such as adequate sleep, nutrition, and social interactions to enhance their mental well-being.

- Healthcare units should implement routine screenings for postpartum depression to identify at-risk mothers early, collaborating with mental health services to provide comprehensive care that addresses both physical and emotional needs.

- Local government units (LGUs) should create community programs that offer resources and support for new mothers, ensuring that healthcare services, including mental health support, are accessible and affordable for low-income families.

- LGUs should ensure that registered social worker are accessible in the community to provide counseling for mothers who experiencing postpartum depression. By having trained professional available, this can offer essential support, guidance and resources to help mothers coper with their new role.

- Nurses, Midwife, Barangay Healthcare Workers (BHW) or any other healthcare worker in the community, in need of training about counseling in order to effectively address the early concerns of postpartum mothers. By equipping this healthcare providers with necessary skills and knowledge, they can early identify symptoms, offer appropriate support and connect mothers to mental health resources.

- Family members should provide emotional and practical support to new mothers, being attentive to their needs and educating themselves about the signs of postpartum depression to encourage mothers to seek help.

- Future researchers are urged to conduct studies that include diverse demographic groups to understand the varying risk factors associated with postpartum depression, as well as to investigate the effectiveness of support interventions aimed at reducing risk. Also

- Healthcare organizations should engage in community awareness campaigns to educate the public about postpartum depression and reduce stigma, while fostering collaboration among healthcare providers, community organizations, and families to create a supportive environment for mothers during the postpartum period.

- Future researchers are encourage to investigate and compare mothers who gave birth via normal spontaneous vaginal delivery (NSVD) with mothers whose babies were admitted to the Neonatal Intensive Care Unit (NICU).
- Government must strengthen programs related to mental health in order to create a more supportive and effective system for individual struggling with mental health issues. This involve increasing access to services like counseling and therapy readily available in the community. Enhancing public awareness and education about mental health by doing community lectures in order to reduce stigma and also it can encourage individuals to seek help.

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