

**PREVALENCE OF POSTPARTUM DEPRESSION AND ASSOCIATED FACTORS
AMONG YOUNG WOMEN OF 18-24 YEARS IN WAKISO DISTRICT**

DOROTHY NYINAWUMUNTU

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DECLARATION

I, NYINAWUMUNTU DOROTHY, hereby declare that this is my original work, is not plagiarized and has not been submitted to any other institution for any award.

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12TH APRIL, 2026

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APPROVAL PAGE

The research report has been written under my supervision and has been submitted under my approval

Name;

Ms. Kobusingye Jacqueline

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Signature

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Date

4TH MAY, 2026

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LIST OF ACRONYMS

PPD	Post-partum Depression
SDG	Sustainable Development Goals
WHO	World Health Organization
SSA	Sub-Saharan Africa
EPDS	Edinburgh Postnatal Depression Scale
CCM	Coping Circumplex Model
SPSS	Statistical Package for Social Sciences

OPERATIONAL DEFINITIONS

Young women	Young women in this study are defined as all mothers aged 18-24
Post-partum Period	The Post-partum Period for this study is 6 to 8 weeks after delivery
Postpartum depression	Those postpartum mothers who score ≥ 12 cut off point of EPDS. From ten questions each of which has four choices resulting maximum score of 30 and a minimum 0
Normal postpartum (not depressed)	Those mothers who score < 12 cuts off point of EPDS
Social support;	Social support for the study participants was measured by MSSS and categories in two groups including; High social support (for scores 24–30) Low social support (below 17)
Parity	Primiparous: One birth Multiparous: Two or more births

LIST OF APPENDICES

AI; Questionnaire

AII; Consent Form English Version

AIII; Consent Form Luganda Version

AIV; Work plan

AV; Budget

TABLE OF CONTENTS

Contents

DECLARATION	i
APPROVAL PAGE	ii
LIST OF ACRONYMS	iii
OPERATIONAL DEFINITIONS	iv
LIST OF APPENDICES	v
ABSTRACT	ix
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background;.....	1
1.2 Problem statement.....	2
1.3 General objective	4
1.3.1 Specific objectives	4
1.4 Study questions	4
1.5 Study Scope	4
1.5.1 Content Scope	4
1.5.1 Time Scope	4
1.5.2 Geographical scope	5
1.6 Justification.....	5
1.6 Significance	5
1.7 Conceptual Framework	6
CHAPTER TWO: LITERATURE REVIEW	8
2.1 Understanding PPD.....	8
2.2 Global perspective on the prevalence of Post-partum depression	9
2.3 Risk factors associated with PPD	10

2.3.1 PPD and Obstetric risk factors;.....	11
2.3.2 PPD and Biological factors.....	12
2.3.3 PPD and Social factors	12
2.3.4 PPD and Lifestyle	13
CHAPTER THREE: METHODS.....	14
3.1. Study design.....	14
3.2 Study Area	14
3.3 Study Population.....	14
3.4 Sample size	14
3.5 Sampling.....	15
3.6 Inclusion and exclusion	15
3.7 Data collection methods and procedure	16
3.9 Data processes and analysis.....	16
3.11 Quality control and assurance.....	17
3.10 Variables.....	17
3.10.1 Dependent variables	17
3.10.2 Independent variables	17
3.13. Ethical considerations.....	18
3.13.1. Ethical Challenges and Risks.....	18
3.13.2. Principles of ethical conduct.....	18
3.13.3 Ethical Approval	19
CHAPTER 4: RESULTS	19
4.1. Introduction	19
4.2 Social demographic factors	19
4.3. Prevalence of Postpartum depression.....	20

4.4 Risk factors associated with PPD	21
4.4.1 Obstetric factors associated with PPD	21
4.4.2 Child related factors	22
4.4.3 Social Support related factors	23
4.4.4 Psychological factors.....	24
4.4.5 Multivariate analysis	25
CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS	28
5.1 Discussion.....	28
5.1.1 Prevalence of PPD.....	28
5.1.2 Factors associated with PPD.....	29
5.2 Conclusion	32
5.3 Recommendations	33
REFERENCES	34
AI; Questionnaire.....	40
AII; CONSENT FORM	51
AIII; CONSENT FORM (LUGANDA VERSION).....	53
AIV; WORK PLAN.....	55
AV; STUDY BUDGET	56

ABSTRACT

Introduction

Post-partum depression (PPD) is among the most common psychological disorder affecting women during the postnatal period. It is a psychological disorder that impacts on behavior, mental health and physical abilities of women following childbirth. The WHO defines PPD as psychological illness that lasts more than 2 weeks and usually exhibits persistent sadness, loss of interest in usually activities etc. Although PPD affects women of all reproductive ages; young women aged 15-24 are more at risk of PPD due the stigma inflicted by the community because of being having a teenage pregnancy and childbirth. Several studies have found that PPD is twice as much among women aged 15-24. In a study done in Indonesian, it was found that young women are more at risk of PPD among all women of reproductive ages.

Methods

The study aimed at assessing prevalence of PPD, and the associated risk factors among young women (18-24). A structured questionnaire was administered to total of 177 young women aged 18-24 leaving in Wakiso district. These were young women accessing postnatal services in the wakiso district. Systematic sampling technique was used to select study participants and Statistical package for Social Sciences (SPSS) was used to analyze the data.

Results

The prevalence of PPD in the study was 33.3%. At the bivariate, parity, type of delivery, unplanned pregnancy, pregnancy complications, baby's preferred sex and current illness, nature of support from partners and depression during pregnancy were more associated with PPD. At the multivariate analysis, unplanned pregnancy, baby's preferred sex, current health status of the baby and support provided by the partner were significantly associated with PPD among young women

Conclusion and Recommendations

PPD is a serious psychological condition affecting the health and wellbeing of young women. The study recommends that the district health office through health facilities designs and implements customized mental health service provision system for young mothers while seeking postnatal care services

CHAPTER ONE: INTRODUCTION

1.1 Background;

Depressive disorders are common psychological conditions that can affect individuals across all demographics. These disorders include significant changes in mood, such as prolonged sadness and a loss of interest in previously enjoyable activities, which can significantly impact various aspects of life, including social and family relationships. According to the World Health Organization (WHO), approximately 3.8% of the global population—equivalent to 280 million people—experience depression, with women being disproportionately affected.

Among women, post-partum depression (PPD) is one of the most prevalent psychological disorders during the postnatal period. PPD is a serious condition that affects the mental, physical, and emotional well-being of mothers after childbirth. The WHO describes PPD as a psychological illness lasting over two weeks, often characterized by persistent sadness, anxiety, and a lack of interest in daily activities. Globally, approximately 10% of pregnant women and new mothers experience depression, which has significant implications for maternal and infant health. The postpartum period is a critical time for the health of both mother and newborn, with the first six months post-delivery being a high-risk phase for developing PPD.

PPD is particularly common in low- and middle-income countries, where contributing risk factors tend to be more pronounced than in high-income countries. Research by Saba M. (2022) highlights that PPD is more prevalent among adolescent mothers, women with premature infants, and those living in urban settings. Prevalence rates in Asia, for instance, vary between 7% and 33%, while a study in Iran using the Edinburgh Postnatal Depression Scale found that over 26% of naturally conceiving mothers experienced PPD.

In sub-Saharan Africa, PPD prevalence rates differ widely due to inadequate detection and treatment. For example, Zimbabwe and Uganda have reported rates of 33% and 7%, respectively, according to Becky (2019). In Nigeria, prevalence rates vary significantly across regions, ranging from 14.6% to 44.5% (Parsons et al., 2017). In the first three months postpartum, about 14.5% of mothers in the region experience depressive episodes, with nearly 42% reporting symptoms during pregnancy.

Young mothers aged 15–24 are especially vulnerable to PPD due to societal stigma surrounding teenage pregnancies. Studies indicate that PPD is twice as likely in this age group. In Indonesia, research by Wurisastuti T. (2020) found young women to be the most at-risk demographic among reproductive-age mothers. Similarly, in Ghana's Bawku District, PPD prevalence was recorded at 50.4%, with nearly half of the affected women being under 24 years old (Dennis B., 2023). In Lagos, Nigeria, factors such as having more than two children, cesarean deliveries, and maternal illness at the time of childbirth contributed to a 35.6% prevalence rate (EO Adeyemo, 2020). Northern Nigeria has reported rates of 44% and 21% in different studies (Tungchama F., 2018).

In East Africa, a meta-analysis by Ayenew Negesse (2022) revealed a pooled PPD prevalence rate of 24%. South Africa, on the other hand, has some of the highest rates on the continent, ranging from 30% to 35% (Samj, S. Afr). In Uganda, available data on PPD is limited. However, studies have reported prevalence rates of 6.1% in peri-urban areas using the Self-Reporting Questionnaire (SRQ-20) (Nakku J., 2010) and 43% in rural regions using the Edinburgh Postnatal Depression Scale (EPDS) (Mulila JK., 2012).

PPD has far-reaching consequences, not only for the mother but also for the child and family. It adversely impacts the mother's quality of life and can hinder the child's social, physical, and cognitive development (Hahn-Holbrook J., 2018). According to Vigod et al. (2021), women with PPD have a doubled risk of developing chronic depression within five years postpartum.

Various factors contribute to the risk of PPD, including maternal characteristics, psychological and social dynamics, delivery methods, and levels of social support. Socioeconomic factors, such as low education levels and poverty, also play a significant role (D Wang, 2021). Holbrook et al. (2020) identified other key risk factors, such as maternal and infant mortality, long working hours, and income inequality. The COVID-19 pandemic has further emphasized the influence of socio-demographic characteristics and inadequate social support on PPD prevalence (Chen Q. et al., 2023).

Antenatal care quality is another determinant. Women who receive timely, quality prenatal care are less likely to develop PPD compared to those with inadequate care. Research shows that PPD prevalence among women who accessed quality antenatal care was 10%, compared to 21% among those who did not (Lua et al., 2018). A retrospective study indicated that poor antenatal care increased the risks of preterm delivery, low birth weight, and maternal depression, all of which heighten PPD vulnerability (Ngocho JS., 2022).

While PPD is preventable and treatable, early detection is essential. Identifying risk factors can help healthcare providers implement timely interventions, especially in culturally diverse settings where socio-cultural factors play a significant role in PPD prevalence (Lancet, 2019).

In Wakiso District, Uganda, there is limited research on PPD prevalence and associated risk factors, particularly among young mothers. This knowledge gap has hindered the implementation of targeted interventions. The current study aims to assess PPD prevalence and identify related risk factors among young mothers in Wakiso District, with the ultimate goal of improving maternal health outcomes in the area.

1.2 Problem statement

Postpartum depression (PPD) is a significant yet often overlooked public health concern that profoundly impacts maternal health outcomes. Beyond contributing to adverse maternal health outcomes such as newborn morbidity and poor health among nursing mothers, PPD has been linked to increasing suicide rates among women. Global and national efforts to improve maternal health indicators, including those aimed at achieving Sustainable Development Goal (SDG) 3.1, strive to reduce maternal and infant mortality rates. However, young mothers

continue to face multifaceted challenges physical, social, psychological, and spiritual—that adversely affect their overall health and well-being (Massoumeh, 2017).

Young mothers are particularly vulnerable to PPD due to various medical complications, limited knowledge about managing postnatal health, and stigmatization from unsupportive family members and communities. This often drives them into silent struggles with depression following childbirth. Numerous studies have investigated the prevalence and factors associated with PPD in different regions, revealing its profound effects on the well-being of women and their newborns. Evidence from these studies underscores the strong correlation between PPD and maternal and neonatal health outcomes (Guan Z., et al., 2020).

In sub-Saharan Africa, studies report wide variations in prevalence, including rates as high as 31.8% in Cameroon and up to 44.5% in Nigeria. A recent systematic review and meta-analysis of 26 studies across the region reported a pooled prevalence of PPD of 22.1% (95% CI: 18.5–26.2), with South Africa (30.6%) and Zimbabwe (29.3%) recording the highest rates, while Tanzania reported the lowest (13.5%). Notably, the prevalence of PPD in sub-Saharan Africa has been rising over time, from 2005–2010 to 2015–2021, signaling a growing public health crisis (Nweke et al., 2024). Across the continent, adolescent girls and young women (AGYW, aged 12–24 years) are at high risk for mental health problems, yet they remain largely neglected in both research and practice (Mutahi et al., 2022).

In East Africa, a meta-analysis of studies conducted between 1998 and 2018 estimated the pooled prevalence of PPD among lactating women at 24% (95% CI: 17.79–30.20). Key risk factors identified included being married (OR = 2.00), lack of support (OR = 6.59), domestic violence (OR = 6.34), and lack of empowerment (OR = 2.79), highlighting the need for interventions focused on women's support and empowerment (Hune et al., 2022).

In Uganda, a recent national meta-analysis reported a pooled PPD prevalence of 29% (95% CI: 21%–37%), with subgroup analyses showing higher rates among special groups such as mothers living with HIV (32%) and general postpartum women (28%). Factors associated with PPD included poor social support (OR = 1.19), poor socioeconomic status (OR = 1.43), maternal illness (OR = 1.22), and cesarean section delivery (OR = 1.15) (Kabunga et al., 2024).

In Wakiso District, a study among women living with HIV reported a PPD prevalence of 28%, with younger age (<20 years) being a significant predictor (APR = 1.93), alongside intimate partner violence (APR = 2.43) and home delivery (APR = 1.91) (Twinomuzuni, 2023). Furthermore, a cross-sectional study in Kampala and Wakiso reported a high depression prevalence (64.4%) among pregnant and postpartum women, with young women aged 15–24 years being particularly vulnerable (Kyomuhendo et al., 2025). These findings emphasize the need to prioritize maternal mental health, especially among younger populations, to improve maternal and child health outcomes (Kabunga et al., 2024).

Despite existing research providing generalized prevalence rates of PPD among women of reproductive age (Denis B., 2023; Beck C.T., 2019; Catherine A., 2021), there is limited focus on the prevalence of PPD among young mothers aged 18 - 24 years and the specific risk factors that predispose them to PPD, particularly in Wakiso District and Uganda as a whole. Young mothers face unique challenges including stigma, unintended pregnancies, economic dependency, and lack of social support compared to their older counterparts, making it critical to explore and document PPD prevalence and risk factors within this group.

Addressing this gap through an in-depth assessment of PPD among young mothers is essential to inform the development of targeted and effective interventions, ultimately improving maternal and newborn health outcomes in Wakiso District and beyond.

1.3 General objective

The general objective of the study was to assess the prevalence of PPD and the determine the risk factors associated with post-partum depression among young women (18-24) in Wakiso district

1.3.1 Specific objectives

1. To assess the prevalence of post-partum depression among young women (18-24) in Wakiso district
2. To identify socio-demographic factors associated with postpartum depression
3. To assess obstetric and child-related factors associated with postpartum depression

1.4 Study questions

1. What is the prevalence level of Post-partum Depression among young women (18-24) in Wakiso district?
2. What socio-demographic factors are associated with postpartum depression
3. What are the obstetric and child-related factors associated with postpartum depression

1.5 Study Scope

1.5.1 Content Scope

The study content scope focused on the prevalence of Post-partum Depression and the risk factors associated to it among young women (18-24) in Wakiso District

1.5.1 Time Scope

The study was conducted for a period of two months between August and September 2024

1.5.2 Geographical scope

The study was conducted from Wakiso district. The district lies in the Central of Uganda and it's bordered by Nakaseke District and Luweero District to the north, Mukono District to the east and Kalangala District in Lake Victoria to the south. On the southwest is Mpigi District and Mityana District to the northwest.

Its headquarters are of Wakiso district are approximately 20 kilometers (12 mi) by road, northwest of Kampala, the capital of Uganda and the largest city in the country. The coordinates of the district are: 00 24N, 32 29E

1.6 Justification

Fluctuations in mood and emotional well-being are common psychological challenges faced by women during the postpartum period (PPD). The processes of pregnancy and childbirth introduce numerous physical, emotional, and psychological stressors that increase susceptibility to mental health disorders such as depression. These disorders often go unnoticed by healthcare providers and family members until they manifest in severe behavioral changes. When left undetected and untreated, the consequences can be profound, leading to long-lasting negative impacts.

The effects of PPD extend beyond the affected women, impacting their newborns and families. Suicidal tendencies among mothers are a critical concern, while the psychological distress experienced by primary caregivers can hinder the development and growth of infants. Additionally, PPD can contribute to domestic violence, further compounding its detrimental effects. The disorder is also linked to poor maternal health outcomes, as mothers experiencing PPD may exhibit reduced healthcare-seeking behaviors.

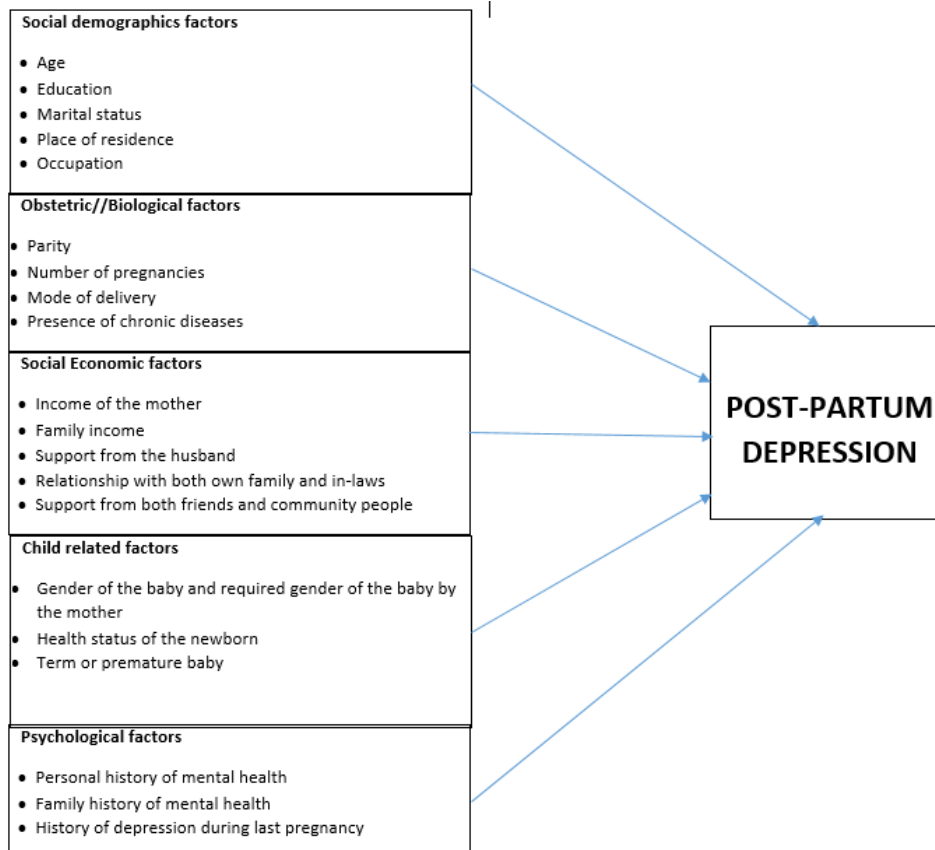
Investigating the prevalence and identifying the risk factors of PPD among women in Wakiso District is crucial. This information can help healthcare providers recognize potential cases early and offer the necessary support to affected mothers. It also provides a foundation for developing operational guidelines and policies aimed at helping women manage and overcome PPD effectively

1.6 Significance

The results obtained from the assessing of the prevalence of PPD and its associated risk factors among young women in Wakiso district are going to add knowledge and information about this silent health disorder that women often struggle with in silence. This information is going to act as evidence in designing guidelines aimed at early detection of potential PPD cases among women and providing the needed care

1.7 Conceptual Framework

A CONCEPTUAL FRAMEWORK ON THE PREVALENCE AND RISK FACTORS ASSOCIATED WITH POSTPARTUM DEPRESSION AMONG YOUNG WOMEN



The above conceptual framework visualizes the different factors that determine the occurrence of PPD. The framework shows the demographic factors which include age, education levels, marital status, place of residence and occupation and these have an influence on the development of depression following delivery; young mothers are more likely to develop depression due to low income levels and other factors like stigma of having a child at an early age. Other factors include the obstetric factors which include the number of children and pregnancies a mother has, the mode of delivery and presence of chronic disease. The social economic factors including income of the mother and family, the support received from the

spouses after delivery and the relationship with family members are also important factors in determine the presence of post-partum depression among young women. Child related factors including gender of the newborn versus the preferred gender of the mother can also cause depression following delivery; the health status of the baby and whether the newborn was term or a premature and the related challenges can also lead to depression among women. Psychological factors including the mothers' personal history of mental health or any history of mental health in the family can also lead to mental health. Mothers who experience depression episodes during pregnancy are also more at risk of developing depression following childbirth

CHAPTER TWO: LITERATURE REVIEW

The literature review is focusing on the prevalence of Post-partum depression and the associated risk factors among women. Although there some studies suggesting post-partum depression among men, the literature review for this study entirely focused on women

2.1 Understanding PPD

Depression is a serious issue of public health concern which is twice among women than men during the childbearing age. According to the Lancet 2021, mental disorders are among the leading causes of the high global health related burden with anxiety together with depression being highest contributors to this health burden and this was made worse by the breakout of the Covid-19 pandemic; there is need to further inform on the new levels of impact of Covid-19 on mental health worldwide

Several efforts have been implemented to improve the global maternal health figures and achieve SDG 3.1 but all these haven't so far achieved their desired objectives; there are several contributors to these failures and among those are maternal health conditions that usually go undetected and in turn affect women. (Lancet 2021). Among such conditions depression episodes among women during the postnatal period. Although studies have found that there are chances of men suffering from PPD, women are more at risk of adverse effects of PPD

The postnatal period is a critical stage in the maternal health and wellbeing; women face challenges during this stage and these present high chances for the development of impactful psychological disorders. The postpartum period is characterized by three distinct illnesses namely; the blues including baby and maternity blues, postpartum/postnatal depression and puerperal psychosis; each of these illnesses differ in their clinical presentation, prevalence and management (Tessema, 2020)

The PPD is the most common psychological complication among women following childbirth. The illness affects 10-15% of women and this creates a serious public health condition affecting these women and their families. The effects of PPD are very severe and far reaching, it not only affect the health and wellbeing of the mother but also the development of the newborn baby and this necessitates the need for effective PPD diagnosis, treatment and prevention efforts within the healthcare service delivery system but also at community level. (Yeboa, 2023)

Although PPD is a serious maternal health issue and affects all women from all walks of life, it usually goes undiagnosed; several measurements have been developed to help in detecting depression among women following childbirth, the development of these PPD screening initiatives require cautious consideration. A lot of evidence is needed while making decisions on the most effective tool to be used during the screening process so that the selected test has good specificity and sensitivity but is also quick and easy to interpret. (Armstrong, 2014) It's

also important that the selected test can easily be incorporated into the daily practice, is culturally sensitive and cost effective. (Chen, 2022)

All through pregnancy to the postnatal period, mothers go through a series of a range of physical, emotional and hormonal changes; they tend to experience confusion, sadness, unnecessary mood changes and this occurs in almost all women. (WHO). There are possibilities for PPD to continuously from the time of pregnancy, or start after childbirth and can last for almost a year (Cooper, 2020). The major main symptoms presented among women with PPD include anxiety, loss of interest in daily activities, lack of sleep, guilt and hopelessness, extreme worry about the child and poor levels of concentration

A recommendation from WHO suggest that perinatal depression screening should be included among the maternal healthcare services provided and referrals and case management services availed to those that might need them; this recommendation is supported by the global goals that urge the prioritization of perinatal mental health as a way of improving women's wellbeing during pregnancy and following childbirth. This feasibility of the universal screening of perinatal depression however remains questioned on whether it can improve clinical outcomes and whether it can be effectively implemented especially in low and middle income countries where there is insufficient health worker (UNDP)

Several research studies suggest that PPD is postpartum depression is biddable to treatment interventions and this necessitates the purpose for the development programs aimed at screening for PPD. However, limited randomized controlled trials have been designed and conducted to guide the effective practice and policy development thus there is need for further research to support the development and implementation of evidence based program. One notable aspect of PPD is that there is no single known way through which women develop PPD thus the feasibility of a single preventive or treatment program for all mothers is next to impossible

2.2 Global perspective on the prevalence of Post-partum depression

According to the WHO, almost 10% of women who are expecting and 13% of those that have just delivered experience certain mental disorders and depression is the most common one. Women in developing countries have higher chances of 15.6% while pregnant and 19.8% following child birth of developing depression; many of these have severe depression that some end up committing suicide. The effect that PPD exerts on women is heavy and as a result the development and growth of the newborns is also severely affected.

Globally, several studies have been conducted and PPD is identified in almost 10-20% of mothers following childbirth. (Wang, 2021). The prevalence levels of PPD in lower and middle countries is the highest globally with figures ranging from 16-24% yet upper and high income countries report less PPD prevalence levels. The recent Covid-19 pandemic made the situation even worse, several studies have indicated that prevalence levels figures have

doubled among women after the pandemic; these figures might even be higher since PPD is usually undetected especially in low and middle income countries.

Other studies have found low prevalence rates of PPD in particular countries. Studies in countries like Malta, Malaysia, Singapore and Denmark have reported prevalence rates of PPD as low as 0.5-9%. In other countries like Costa Rica, South Africa, Chile, Taiwan and Korea, PPD prevalence rates have been reported with higher figures of 34-57% 24. (Beck C. T, 2015). It's important to note that the lack of an affective universal screening tool for PPD has led to the variations in the reporting of the prevalence of PPD globally with each country using customized screening programs which might not be effective especially in low and middle income countries where healthcare service delivery is strained with the lack of enough equipment and health work force.

Within the sub-Saharan African (SSA) region, the average prevalence rate of PPD stands at 6.8%, although more studies need to be made to update this figure due to the effects brought about by the recent Covid-19 pandemic. A recent cross sectional study carried out by Therence Nwana Dingana, 2023 in Cameroon reported a prevalence rate of 31.8%

In a study done by Catherine Atuhaire et al, 2021 in Uganda, she reported a PPD prevalence rate of 27.1%. This varied from another study done by Naomi Kyeremaa Yeboa, 2023 which reported prevalence rate of 15.9%; there are several factors that might have caused this variation mainly the Covid-19 pandemic that affected several people include pregnant women. Pregnant women faced several challenges during Covid-19 pandemic which included difficulties in accessing healthcare and low incomes and these exerted a lot of stress hence PPD.

A study carried out by Halbreich and Karkun (2018) indicated that the reported frequency of PPD global prevalence of 10-15% might not be an accurate global indicator of this serious public health issue of concern. Their views based majorly on two specific observations which included the wider variations of PPD prevalence that range from 0 way up to 60% and above; they noted the inter-country variations do not cover all they in-country, cultural and diversities in social economic circumstances and this makes interpretation very hard. The other concern was the EPDS commonly used in screening for PPD; they noted that the screen tool focusses on Post-partum mood disorder which do not take into considerations other symptoms like anxiety, stress, irritability which are common among women following childbirth thus EPDS might not be effective in detecting PPD. Another constrain of the EPDS screening tool is the variations in the cut-off points in every country; these cut off scores range from 9 to 13.

2.3 Risk factors associated with PPD

All pregnant women can develop mental disorders during pregnancy and immediately after childbirth. There are higher chances of women in low and middle countries since majority of these women are struggling with other social issues including exposure to all kinds of violence,

poor incomes, conflict situations, and low social support systems in addition to the poor healthcare service delivery systems in many of these countries.

There are several risk factors that are associated with PPD and these include psychological factors, social factors and biological/genetic factors. A meta-analysis carried out by Hahn-Holbrook et al. 2018, showed several factors associated with PPD; these factors were classified into five major domains of risk factors and these included; obstetric risk factors, the social risk factors, biological/hormonal risk factors, psychiatric risk factor, and lifestyle risk factors

2.3.1 PPD and Obstetric risk factors;

Several studies have reported a significant association between the number of deliveries and PPD although some of these have presented conflicting results. Results from a study done by Mayberry et. Al (2017) showed that PPD is more common among multiparous women as opposed to the nulliparous while another study done by Matsin in 2016 indicated a higher prevalence in nulliparous women. Furthermore, another study done by Deen 2019 found women who have had two or more children is more likely to suffer with PPD due to the higher psychological burden. These differences in results indicate that the number of deliveries is not an independent risk factor for PPD and that the development of PPD and other illness might be cause by other psychosocial situations that several of deliveries create among women.

The level of risk a pregnancy presents to a mother is associated with increased chances of developing PPD. Many of these conditions force women into unwanted cesarean sections or longer hours in hospitals during pregnancy and after childbirth. (I Agrawal, 2022). Complications after delivery present higher chances of PPD as compared to those during labor such as obstetric hemorrhages. Mothers who deliver their children with birth weights less than 1.5kg are far more at risk of developing PPD Compared to others.

The difference between the expectations of a mother and the events that unfold during the pregnancy period and childbirth determine the development of PPD. Several studies have indicated that women prefer to have normal vaginal child delivery during the perinatal stage and those that end up having cesarean sections are more susceptible to PPD than those who are able to have natural childbirth (Atuhaire, 2021). Having a smooth pregnancy period without complications and being able to successfully breastfeed is associated with lower risk of PPD.

There has been reports of an association between breast feeding and PPD; reports suggested that women who practice exclusive breastfeeding in for the first 3 months have showed reduced chances of developing PPD. A study by Hamdan and Tamim {2020) showed that women who breastfeed for more than 4 months had less risks of developing PPD

There was an observed relationship between lower hemoglobin concentration during the 7th day following delivery (<120 g/L) and PPD symptoms on the 28th day following childbirth. In addition to that, an outstanding association has been observed between homocysteinemia in the 1st week and 6 weeks following childbirth; however, the evidence to prove that postpartum

anemia or complications associated with postpartum anemia can lead to PPD is not enough (Armstrong, 2020)

2.3.2 PPD and Biological factors

Reports suggest that young mothers are more at risk of PPD compared to adult women. Several studies have found the highest levels of depression among mothers aged 13-19 while the lowest rates have been seen among women aged 31-35. Abdollahi et al. (2017) found that higher maternal ages and maternal efficacy are associated with a reduced risk of postpartum depression.

Several studies suggest that glucose metabolism disorders during pregnancy increase the risk of PPD in women; women with high glucose levels (mean of 120 vs. 114 mg/dl) after an hour after performing the glucose challenge test with 50 g of glucose were more at risk of postpartum depression than others. Levels of Serotonin in the blood is also an effective risk factors on PPD. The levels of serotonin is dependent on individual diet; consumption of foods rich in proteins reduces the amount of Serotonin in the brain while a carbohydrate snack has reverse effects. In nutritional deficiencies, reduced tryptophan in the brain up to 15% and this leads to increased depression scale rate of postpartum depression (AS Putri, 2023)

2.3.3 PPD and Social factors

Social support entails different aspects of support including emotional, financial support, intelligence, and empathetic relations. Social support plays a key role in reducing the chances and risks of PPD. The lack of social support creates the ground of onset of PPD and other anxiety disorders. Several studies have noted having decision-making power at home and increased partner support have been proved as important factors in improving women's reproductive health (Tembo · 2023). Spousal and other forms of domestic violence during the pregnancy period have been documented as strong contributors to the high incidences of PPD; more to that, the relationships women have with other family members and other communal behaviors during prenatal period have a significant influence on PPD.(J Niyonsenga, 2021)

The relationship between socioeconomic level and depression is also an important one to be explored. Women with high social economic standards have lower chances of PPD due to the ability to provide for themselves and also seek healthcare whenever needed compared to their counterparts who rely on their spouses to provide and make decisions for them

Another important social factor is employment status more so for women with professional careers; PPD has been more associated among women with professional careers due to the

demanding nature of their jobs and social responsibilities. Higher education and low income status have been heavily associated with high risks of PPD (J Niyonsenga, 2021)

2.3.4 PPD and Lifestyle

Life style factors include food intake patterns, exercise sleep status, and physical activities and these may determine PPD among women. Chatzi L (2019) reported that adequate consumption of seafood, vegetables, legumes, milk, fruits, and dairy products, olive oil, and a variety of nutritious foods may reduce postpartum depression by half. It's also noted that Vitamin B6 is effective in the production of serotonin from tryptophan as a cofactor thus vitamin reduction may be involved in the process of PPD development. Another study noted that reduced intake of Zinc is associated with incidences of PPD

Apart from body nutrients, sleep status is also an important factor in influencing the risk of depression. Results from different studies show that less sleep is directly associated with PPD. Other started have found a correlation between fatigue and depression levels in days following childbirth (Chatzi L, 2011). Women who have longer periods of sleep deprivation have more chances of suffering from depression after delivery

Some evidence to suggest that exercise and physical activity have significant benefits in reducing depression symptoms and these are comparable with clinical benefits. Women who have moderate physical exercises especially in the third trimester of pregnancy usually report lower PPD scale figures on screening 6 weeks following delivery. Psychical exercises have an impact on the mental conditions of women in away y that it increases the endorphins which as a result improve mental health (R Hymas, 2019)

Coping with PPD varies from one mother to another depending on the circumstances they find themselves in. This includes the social support available for them and other social economic factors that contribute to their general health and wellbeing (Wang D, 2021). It is important that mothers have enough social support and professional support to deal with anxieties and challenges associated with motherhood.

The Coping Circumplex Model (CCM) is a psychological model developed to band together several coping mechanisms (Stanisławski 2019). The model is based on several assumptions that all individuals suffering from depression symptoms like stress have two major responsibilities and these include solving the issues affecting them but also ensure emotional stability. This is usually through different aspects including the problem focus coping aspect but also the motional-focus coping. Other coping strategies in the model include social support, self-care and avoidant coping. (Faisal-Cury A, 2004)

The ability to cope with depression is a behavioral but also a cognitive process that individuals utilize to deal with depressive situations that always present unique challenges that can be life threatening in several ways (SSaba N, 2013). There are several approaches as defined in the CCM that women use to deal with PP. Problem-focused strategy includes directing energies towards the source of depression yet emotional-focused strategy is applied

when an individual decides to deal with the feelings and thoughts related to the stressing factor. Social support is utilized when mothers use family and friends to cope with the depression; self-care suggests that mothers focus on simple exercises and ensuring that they are health and avoidant coping strategy refers to mechanisms of avoiding the cause of the depression and the emotions relating to it (Stanisławski 2019).

CHAPTER THREE: METHODS

3.1. Study design

A cross-sectional study design was used for the study. This study design was considered more appropriate because of its ability in providing the needed data to assess the prevalence of PPD among young women but also determine the related risk factors. The study design was efficient in collecting data aimed at describing the status quo of a phenomenon. It's also useful in defining relationships and characteristics of a particular phenomenon within a population at a given time.

3.2 Study Area

The study was carried out in Wakiso District. Wakiso district is made up of two counties of Busiro and Kyadondo. One parish from each county was randomly selected and study participants were randomly selected from these counties and these included Kisubi in Busiro county and Bweyogerere ward in Kyandodo. The selection of two parishes with one from each sub-county aimed at ensuring representation due to the big size of wakiso district

3.3 Study Population

The Ministry of Health-Uganda and WHO recommend that Post-natal care is provided to the mother and the newborn for the first 6 weeks after delivery; this period helps health workers to assess the general wellbeing of both the mother and the child. This study targeted young Women within the reproductive age (18 to 24) who are seeking postnatal care services 6 weeks after delivery and living in Wakiso district. The estimated population of Wakiso district is 2,007,700 and has a growth rate of 4.1%. Population density of the district is about 700 persons per square kilometer with a ratio of 90 males to 100 females. (Wakiso District Local Government)

3.4 Sample size

The sample size was determined by the fisher's et al formula with the calculations below

$$N = Z^2 p \{1-p\} / D^2$$

N=Sample size.

Z=Standard error from the mean corresponding to 95% confidence level=1.96

P=13% is the estimated prevalence of postpartum depression which is 13% based on a previous study

d=Precision/ reliability with which to determine p =5%

$$N = Z^2 p \{1-p\} / D^2$$

$$N = 1.96 \times 1.96 \times 0.13 (1-0.13) / 0.05 \times 0.05$$

$$= 3.8416 \times 0.13 \times 0.87 / 0.0025$$

$$= 3.8416 \times 13 \times 87 / 25$$

$$= 4344.8496 / 25$$

$$= 173.793984$$

$$= 174 \text{ respondents}$$

3.5 Sampling

Random sampling based on the study inclusion and exclusion criteria was used to select participants for the study. All participants who were randomly selected to participate in the study were young women (18-24) who were within their postnatal period which is defined by the World Health Organization as a period from childbirth up to six weeks

3.6 Inclusion and exclusion

All young women aged (18–24 years) and are within the WHO defined postpartum period were included in the study; participants were mothers who have a live baby at the time of the study and were able to consent to the participation in the study. Mothers included were residents of the study area (Wakiso district).

The exclusion criteria included mothers with a mentally unstable or who were seriously ill at the time of data collection, mothers below the age of 18 years and above 24 years at the time of data collection, and mothers who did not consent to the study. A total of 24 mothers were excluded in the study, 23 declined to participate in the study and 1 mother was ill at the time of data collection.

3.7 Measurement of Postpartum Depression

Postpartum depression was assessed using the Edinburgh Postnatal Depression Scale (EPDS), a validated 10-item screening tool. Each item is scored from 0–3, giving a total score of 0–30.

1. Score ≥ 12 - Probable PPD
2. Score < 12 - No PPD

The EPDS was selected due to:

- High validity and reliability
- Suitability in low-resource settings
- Ease of administration

The tool was administered through interviewer-guided questionnaires.

3.8 Data collection methods and procedure

The main data collection tool used was a structured questionnaire and it was administered through face-to-face interviews with selected participants. The questionnaire had different sections including; social demographic information of the participant, pregnancy and birth related section, the child related section; family relationship section, psychological variables and history section and the Edinburg Postnatal Depression Scale (EPDS) a 10-item screening tool used in screening Post-partum depression

The questionnaire was upload into Kobocollect to ease to enable electronic data collection. Research assistants received a 1 day training on the data collection tool and methods and on the usage of kobocollect program. Research assistants required to speak both English and Luganda which is the most common language used in Wakiso district. The data collection tool was pretested among 5% of the total sample in health facility in Mpigi district

Consent was sought from every mother who qualified for the study; their rights to participation were explained to them and given a chance to make an informed consent. A one on one interview was carried out with those who gave consent and the interviews were done in a private place within the health facility. Data was collected be collected on daily basis from morning to evening for five days including weekends for the period of two weeks. On daily basis the researcher counterchecked for accuracy and completeness of the filled questionnaire and all completed questionnaires will be given number after completing the work.

3.9 Data processes and analysis

The researcher made all efforts to ensure that the guidelines for the study are strictly followed at all stages of the study. The researcher made sure that the right people are selected and included in the study. Interviews were held in the most conducive environments were privacy and confidentiality of the participants' information was assured

Soft copy Filled-in questionnaires were checked for completeness and consistency of the responses. Data was imported into statistical package for social sciences (SPSS) version 17 from the Kobocollect program. Editing of the data occurred after the importation by running frequencies and checking for out of range responses.

Descriptive analysis was used to describe the data. Cross tabulation was used to check the significant of association between independent variable and the outcome. Association between independent variable and dependent variable was considered significant if P-value is less than 0.05. Chi-squared test was used to determine associations between independent variables and the outcome. Logistic regression was also used to determine independent predictors for postpartum depression. Odds ratios (OR) was reported together with their 95% confidence intervals (CI).

3.10 Quality control and assurance

The questionnaires developed were pre-tested in another district to ensure validity and reliability of the data collection tool. This helped in ensuring that the data collection tool is effective, precise and easy for the respondent to understand and respond to appropriately

Daily supervision of Research assistants was done to ensure that the data being collected is of the required quality; the researcher held short debriefing meetings at the beginning and end of every day's work with the research assistants to compare the findings, share experiences and lessons learnt for the next day's work.

3.11 Variables

3.11.1 Dependent variables

The independent variable is the prevalence of PPD among young women of the reproductive age (18-24) in Wakiso district and this was measured by the EPDS scores. The EPDS has a total score of 30 where a score below or equal to 12 represents absence of PPD and a score above 12 representing possible presence of depression.

3.11.2 Independent variables

The independent variables are the risk factors associated with PPD among women in their reproductive ages. The independent variables will be looked at on different levels including;

Social demographic factors; maternal age, religion, education Level, marital status, parity, and head of household, size of the family, women occupation and husband occupation

Pregnancy and childbirth related complications; which will include number of pregnancies and live babies, pregnancy complications in during the last pregnancy, delivery mode. Chronic complication a mother may have

The child related factors; gender of the newborn, desired gender of the newborn, healthy status of the newborn, whether the baby was preterm, feeding habits of the child

Social support factors; a Likert scale question of 5 was used to assess the relationship between the mother and other family members especially the spouse. A maternal social support scale was used to assess social support

Psychological/psycho-social factors; this will look at the mothers mental history, mental history within the family and any history of depression especially during the last pregnancy

3.12. Ethical considerations

3.12.1. Ethical Challenges and Risks

The five principles of conducting ethical research were described by Tolich and Davidson (1998) and these included: to do no harm, to have voluntary participation, to have informed consent, to avoid deceit, to keep the identity of participants anonymous and/or confidential

3.12.2. Principles of ethical conduct

- 1) Voluntary Participation; Participants were given the opportunity to voluntarily agree to participate in the study or decline. Participants were asked if they wish to participate in the study during the initial contact by the guardians or caretakers, further consent was sought by the researcher before the start of the interview and only those that consented to participate were taken on.
- 2) Informed consent; a detailed explanation regarding the study and how the information will be used was provided to the participants prior to the commencement of the interviews. A consent form in the language the interviewee is more comfortable with was provided and signed to show that the participant understood the aim of the study and that they were not influenced in any way to participate in the study
- 3) Respect for anonymity and confidentiality; privacy and anonymity were maintained throughout the study. All participants had individual interviews therefore participants were not aware who the other participants are. All documents containing confidential information such as recordings, consent forms and transcriptions were kept in a secure place where they can't be accessed by third party. Participants were also given pseudonyms to protect their identity in the research report.
- 4) Beneficence and non-maleficence (To do no harm); beneficence relates to the benefits of the research, while non-maleficence relates to the potential risks of participation". The researcher ensured beneficence by sticking to the aim and objectives of the study and ensure Non-maleficence by being extra sensitive during the interviews.
- 5) Respect for privacy; an invasion of privacy happens when private information such as beliefs, attitudes, opinions and records, is shared with others, without the participant's knowledge or consent. A researcher cannot decide on behalf of other persons on those delicate issues. All aims, instruments and methodology must be discussed with the prospective subject and the research workers prior to the investigation. The researcher will ensure that never at any one time does a third party unless authorized will access personal details of the participants.

3.12.3 Ethical Approval

Ethical approval will be sought from Research Ethical Committee of Uganda Christian University. Approvals from the health facilities the study will be conducted will also be sought before the commencement of the study

CHAPTER 4: RESULTS

4.1. Introduction

The chapter presents the analysis and interpretations of the findings made by the study. The study aimed at measuring the risk factors associated with post-partum depression and assessing the coping strategies among young women (18-24) in Wakiso district

The chapter presents findings and interpretation of results according to the study objectives below;

- I. To assess the prevalence Post-partum depression among young women (18-24) in Wakiso district
- II. To determine the risk factors associated to Post-partum depression among young women (18-24) in Wakiso district

4.2 Social demographic factors

(Table 1) A table showing social demographic characteristics of the study participants (N=170)

<i>Variables</i>		<i>Post-Partum depression</i>	
		<i>Frequency</i>	<i>Percentages</i>
Age	18 -20	58	34.1%
	21 -24	112	65.9%
Marital Status	Married	117	68.9%
	Not married	53	31.1%
Residence	Urban	118	69.4%

	Rural	52	30.6%
Education Status	None	21	12.4%
	Primary	58	34.1%
	Secondary	56	32.9%
	Tertiary	35	20.6%
Religion	Christians	87	51.2%
	Muslims	83	48.8%
Occupation	Employed	61	35.9%
	Non-employed	109	64.1%

According to the study results, 170 mothers were identified and included in the study and these were all young women aged 18-24. Majority of the study participants, 112 (65.91%) were aged 21-24 and the rest 58 (34.1%) were between ages of 18-20 years. Majority of the participants, 118 (69.4%) were staying with the urban areas of Wakiso district.

Majority of the participants, 117 (68.9%) were married and 53 (31.1%) were either single, divorced or widowed. Majority of the study participants 58 (34.1%) had completed primary school and these were followed by 56 (32.9%) participants who had completed secondary school. Majority of the study participants 87 (51.2%) were Christians. 109 (64.1%) of the study participants were non-employed and relying on their husband for financial support.

4.3. Prevalence of Postpartum depression

The prevalence of PPD in this study was determined by dividing the number of respondents who had signs of PPD (Scored ≥ 12 on the Edinburgh Postnatal Depression Scale (EPDS)) the total number of participants in the study

Participants with PPD symptoms = 57

Total number of participants = 170

Prevalence = $57/170 \times 100$

= 33.5%

The prevalence of PPD in this study was 33.5%

4.4 Risk factors associated with PPD

4.4.1 Obstetric factors associated with PPD

(Table 2) Table showing Obstetric factors associated with PPD among young women in Wakiso district (N=117)

<i>Variables</i>		<i>Postpartum depression</i>			
		<i>Cases</i>	<i>Controls</i>	<i>Frequency</i>	<i>P-value</i>
Parity	Primiparous	37 (%)	76 (%)	113 (74.4%)	0.04*
	Multiparous	28 (%)	29 (%)	57 (%)	
Number of pregnancies	Primigravida	36 (28%)	73 (72%)	109 (70%)	0.06
	Multigravida	29	32	61 (30%)	
Had a stillbirths/mi scarriages Incident	Yes	9 (56%)	7 (44%)	16 (14%)	0.06
	No	56	98	154(86%)	
Number of live children	less than or equal to 1	42 (31.5%)	77 (68.5%)	119 (78.7%)	0.46
	Greater than or equal to 2	23 (40%)	28 (60%)	51 (21.3%)	
Place of birth	Hospital	31 (31.6%)	67 (68.4%)	125(83.8%)	0.38
	Home	8 (42.1%)	11 (57.9%)	45 (16.2%)	1
Type of last delivery	Normal Vagina Delivery	38 (28%)	78 (72%)	116 (76.1%)	1
	Caesarean Section	27 (50%)	27 (50%)	54 (23.9%)	0.03*
Vacuum Assisted delivery	Yes	2 (66.7%)	1 (33.3%)	3 (2.6%)	0.22
	No	63 (32.5%)	107 (67.5%)	167 (97.4%)	1

Recent pregnancy is planned	Yes	38 (27.8%)	79 (72.2%)	117 (77%)	1
	No	27 (51.9%)	26 (48.1%)	53 (23%)	0.02*
Complications during pregnancy and delivery	Yes	28 (48.4%)	29 (51.7%)	57 (26.5%)	0.04*
	No	37 (27.9%)	76 (72.1%)	113 (73.5%)	1
Statistically significant at $p < 0.05$.					

About 113 (74.4%) of the study participants were Primiparous and 109 (70%) had been pregnant only once in their lifetime. From the study, 16 (14%) participants reported that they had experienced miscarriages or stillbirths and 119 (78.7%) had one child alive. For 98 (83.8%) of the study participants, their deliveries were attended to by trained health assistants in hospitals and only 3 (2.6%) reported that they had vacuum assistance during delivery.

The study had 125 (76.1%) participants reporting that they had normal vaginal deliveries and 113 (73.5%) of the participants reported that they never experienced any complications during their pregnancy. About 58 (23%) participants from the study reported that their last pregnancy was unplanned.

According to the study results, the statistically significant obstetric factors included, Parity with a (P-value of 0.04), Primiparous women were more likely to experience PPD compared to multiparous mothers; the type of pregnancy was significant with a (P-value of 0.03), women who underwent cesarean section were more likely to experience PPD; unplanned pregnancy and Labour complications were also significant obstetric factors with (P-values of 0.02 and 0.04) respectively, women with unplanned pregnancy and those with pregnancy complications are at risk of PPD

4.4.2 Child related factors

(Table 3) table showing child related factors associated with PPD among young women in Wakiso district (N=117)

Variables		Postpartum depression			
		Cases	Controls	Frequency	P-value
Sex of the baby	Male	35 (32.4%)	60 (67.6%)	95 (58.1%)	0.79
	Female	30 (34.7%)	45 (65.3%)	75 (41.9%)	
Preferred sex of the baby	Male	37 (28.9%)	73 (71.9%)	110 (70.9%)	0.01*
	Female	28 (44.1%)	32 (55.9%)	60 (29.1%)	

Gestational age	Term	44 (31%)	83 (69%)	127 (85.5%)	0.61
	Preterm	21 (47.1%)	22 (52.9%)	43 (14.5%)	
Baby admitted in ICU after birth	Yes	7 (58.3%)	5 (41.7%)	12 (10.3%)	0.78
	No	58 (30.5%)	100 (69.5%)	158 (89.7%)	
Baby currently ill	Yes	15 (57.7%)	11 (42.3%)	26 (22.2%)	0.00*
	No	50 (26.4%)	94 (73.6%)	144 (77.8%)	
Feeding of the baby	Breastfeeding	41 (29.8%)	80 (70.2%)	121 (80.3%)	0.09
	Formula	24(47.8%)	25 (52.2%)	49 (19.7%)	
Statistically significant at $p < 0.05$.					

Majority of the participants' children were Males, 95 (58.1%). About 110 (70.89%) preferred to deliver male children. One-hundred twenty seven participants (85.5%) in the study had term deliveries and only 12 (10.3%) reported that their infants were put under intensive care units after delivery. Only 26 (22.2%) infants were reported ill. 121 (80.3%) participants reported that they were breastfeeding their infants.

In regards to the child-related factors, sex preference of the newborn by the mother was significant with 0.01 with mothers who don't get their preferred sex more likely to experience PPD. The newborn's current health status was also significantly associated with P-values of and 0.00 with mothers with ill newborns being more at risk of PPD

4.4.3 Social Support related factors

(Table 4) A table showing social support related factors associated with PPD among young women in Wakiso district (N=117)

Variables		Postpartum depression			
		Cases	Controls	Frequency	P-value
Support provided by your partner	Low Support	28 (53.6%)	26 (46.4%)	54 (23.9%)	0.01*
	High Support	37 (27%)	79 (73%)	116 (76.1%)	1
Support provided by other family members	Low Support	34 (28.8%)	66 (71.2%)	100 (62.4%)	1
	High Support	31 (41%)	39 (59%)	70 (37.6%)	0.18

Support provided by friends community	Low Support	41 (38.9%)	58 (61.1%)	99 (61.5%)	1
	High Support	24 (24.4%)	47 (75.6%)	71 (38.5%)	0.11
Accessed professional mental health support	Yes	30 (45.6%)	31 (51.4%)	61 (30%)	0.02*
	No	35 (26.8%)	74 (73.2%)	109 (70%)	1
<i>Statistically significant at p < 0.05.</i>					

The study used the Maternal Social Support Scale to measure the association of social support with postpartum depression. From the study, 116 (76.1%) reported that they received high support from their husbands during pregnancy and after childbirth. Only 70 (37.6%) participants received high support from other family members including in-laws and just 71(38.5%) received support from close friends and other community members. From the study participants, only 61 (30%) were able to access professional support whenever they needed and this included counseling and or therapy after delivery from health workers.

The kind of support provided by partners was statistically significant with a P-Value of 0.01 with PPD more likely among those with low support and access to professional mental health support with a P-Value of 0.02 with PPD more likely among those that didn't access professional support.

4.4.4 Psychological factors

(Table 5) A study showing psychological factors associated with PPD among young women in Wakiso district (N=117)

<i>Variables</i>		<i>Postpartum Depression</i>			
		<i>Cases</i>	<i>Controls</i>	<i>Frequency</i>	<i>P-value</i>
Suffered from depression during your last pregnancy	Yes	30 (47.2%)	32 (52.8%)	62 (30.8%)	0.03*
	No	35 (27.2%)	73 (72.8%)	108 (69.2%)	
Family member suffered from any psychological disorder	Yes	21 (32%)	30 (68%)	51 (21.4%)	0.87
	No	44 (33.7%)	75 (66.3%)	119 (78.6%)	
Ever suffered	Yes	7 (63.6%)	4 (36.4%)	11 (9.4%)	

from a Psychological disorder	No	58 (30.2%)	101(69.8%)	159 (90.6%)	0.03*
Had social/financial issues during last pregnancy	Yes	42 (45.3%)	48 (54.7%)	89 (54.7%)	0.003*
	No	23 (18.9%)	58 (81.1%)	81 (45.3%)	
Statistically significant at $p < 0.05$.					

From the study participants, only 62 (30.8%) reported that they had some depression i.e. stress, anxiety e.t.c during their previous pregnancies and 51 (21.4%) participants reported that there had a family members who ever suffered from depression. Eleven (9.4%) reported a history of psychological disorder and more than 89 (54.7%) participants reported that they had some form of social or financial challenge during their pregnancies.

Psychological factors that were statistically significant with PPD included suffering from depression during the last pregnancy with P=value of 0.03, women who experienced depression during pregnancy were more at risk of PPD. History of psychological disorder was also statistically significant with a P-value of 0.03 and social/financial challenges significant with P-value of 0.003

4.4.5 Multivariate analysis

(Table 6) Multivariable logistic regression showing factors associated with PPD among young women in Wakiso district

Variables		Post-partum depression		
		Frequency	COR (95% CI)	AOR (95% CI)
Age	18 - 20	32 (27.4%)	2.24 (0.97, 5.19)	2.64 (-1.99, 1.86)
	21 - 24	85 (72.6%)	1	1
Marital Status	Married	90 (77%)	1	1
	Not married	27 (23%)	0.36 (0.15, 0.85)	3.06 (-0.78, 3.66)
Employment status	Employed	34 (29.1%)	0.43 (0.19, 0.99)	2.98 (0.3, 4.63)
	Unemployed	83 (70.9%)	1	1

Parity	Primiparous	86 (74.4%)	1	1
	Multiparous	31 (26.5%)	0.38 (0.16, 0.9)	2.98 (-2.15, 2.19)
Type of last delivery	Vagina Delivery	89 (76.1%)	1	1
	Caesarean Section	28 (23.9%)	2.19 (1.14, 4.12)	2.97 (-2.65, 2.41)
Recent pregnancy is planned	Yes	90 (77%)	1	1
	No	27 (23%)	0.43 (0.18, 1.01)	2.98 (-5.18, -0.85)*
Complications during pregnancy and delivery	Yes	31 (26.5%)	2.42 (1.04, 5.65)	2.94 (-2.99, 1.3)
	No	86 (73.5%)	1	1
Preferred sex of the baby	Male	83 (70.9%)	1	1
	Female	34 (29.1%)	0.52 (0.23, 1.18)	5.17 (0.88, 7.4)**
Baby currently ill	Yes	26 (22.2%)	3.81 (1.54, 9.43)	3.19 (0.69, 5.29)***
	No	91 (77.8%)	1	
Suffered from depression during your last pregnancy	Yes	36 (30.8%)	2.56 (1.12, 5.81)	2.85 (-2.69, 1.47)
	No	81 (69.2%)	1	1
Ever suffered from a Psychological disorder	Yes	11 (9.4%)	4.05 (1.98, 8.27)	2.93 (-0.39, 3.88)
	No	106 (90.6%)	1	1
Had	Yes	64 (54.7%)	1	1

social/financial issues during last pregnancy	No	53 (45.3%)	3.56 (1.53, 8.30)	4.94 (-1.56, 4.78)
Support provided by your partner	Low Support	72 (61.5%)	3.125 (1.3, 7.52)	2.80 (-4.76, -0.67)****
	High Support	45 (38.5%)	1	1
Accessed professional mental health support	Yes	35 (30%)	2.58 (1.13, 5.87)	3.82 (0.45, 2.12)
	No	82 (70%)	1	1
*Statistically significant with *P=0.04, **P=0.02, ***0.015, ****P=0.01				

The bivariate analysis was conducted and several variables fulfilled the criteria and these included, age, marital status, employment status, parity, recent pregnancy was unplanned, complications during pregnancy, preferred sex for the baby, baby's illness depression during pregnancy, history of psychological disorders, social/financial issues during pregnancy, support provided by spouse and access to professional mental health support. These were included in the multivariate logistic regression model and the results indicated that recent pregnancy is planned, preferred sex for the baby, baby being currently ill and the support provided by the spouse were statistically significantly associated with Postpartum depression

Participants who were single, widowed or divorced were 3.06 times likely to develop postpartum depression (AOR =3.06, 95%: -0.78, 3.66). Participants whose pregnancies were not planned were 2.98 times more likely to develop PPD (AOR = 2.98, 95%CI: -5.18, -0.85) and who preferred a different sex were 5.17 times more associated with developing PPD (AOR = 5.17, 95%CI: 0.88, 7.4)

Participants whose children were ill following data collection were three times more likely to develop PPD as related to their counterparts with healthy children (AOR = 3.19, 95%CI: 0.69, 5.29). Mothers who received low support from the spouses after delivery were 2.80 times at risk of developing PPD compared to their fellows who were supported by their husbands. (AOR = 2.80, 95%CI: -4.76, -0.67).

At the multivariable logistical regression, four variables were statistically significant with PPD and these included; recent pregnancy being planned, this was significant with P-value of 0.04 (AOR=2.98, 95% CI: -5.18, -0.85), the preferred sex for the child was significant with P-value of 0.02 (AOR=5.17, 95% CI: 0.88, 7.4), baby's current health was significant at P-value 0.015 (AOR=3.19, 95% CI: 0.69, 5.29). Support provided by partner was significant with P-value of 0.01 (AOR=2.80, 95% CI: -4.76, -0.67).

CHAPTER FIVE: DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Discussion

The Chapter presents the discussions for the study findings which include the risk factors associated with PPD among young women and the evaluation of the strategies used to cope with PPD. The chapter also makes conclusions from the study objectives and further suggests recommendations to specific institutions for proper management and service delivery for young women during the postnatal periods to prevent depression scenarios. The chapter also presents recommendations for future research studies

This study aimed at measuring the risk factors associated with post-partum depression but also evaluating the common coping mechanism of postpartum depression among young women (18-24) in Wakiso district. The study was based on the following objectives;

1. To assess the prevalence of post-partum depression among young women (18-24) in Wakiso district
2. To determine the risk factors associated to post-partum depression among young women (18-24) in Wakiso district

5.1.1 Prevalence of PPD

In this study the prevalence of PPD was 33.5%. This rate is 3-3 times higher than the global reported estimated rate of PPD which stands at 17.7% (Gusak, 2024). This figure is in range with other studies done in Palestine that reported a 33.9% rate and other Arab countries that reported ranges between 8-40% in 2020 (Ayoub, et.al, 2020). However, some studies have reported higher prevalence rates in other countries like South Africa, Eswatini, and Croatia that reported 39%, 47.4% and 45.03% respectively. (Nyundu, 2020; Dlamini, 2019; Wang, 2021). Other studies have reported lower prevalence rates especially developed countries like Canada, Iran and Australia that had 8%, 5.5% and 7.6%. (Dennis, 2021; Goshtasebi, 2021 and McMahon, 2011) The variances in these studies is attributed to the different support

systems available for postnatal mothers in the different countries but also the different EPDS cut off points for each study.

5.1.2 Factors associated with PPD

The postpartum period presents a unique experience and challenges especially to young women since majority are first time mothers and many of these are potential victims of Postpartum depression. In this study, several factors were found to be significantly associated to with PPD and among those included, age, marital Status, employment status, parity, unplanned pregnancy, complications during pregnancy and delivery, newborn sex preference, baby currently ill, depression during your last pregnancy, history of Psychological disorder, social/financial issues during last pregnancy, support provided by your partner, and access to professional mental health support

Social demographic Factors associated with PPD

In the study, age and marital status were the only social demographic factors that were associated with PPD, this can be attributed to the fact that motherhood presents unique challenges to young women especially first time mothers who were the majority in the study. Marital status was also significant associated to PPD because women who are single, widowed or divorced were 3.06 times more likely to suffer from postpartum depression, this can also be attributed to the grief of from the death of their spouses for the widows and separations from the single and divorced women. This find is similar to that made by Baumgartner JN (2014) and Madeghe BA (2016) that found similar significance between age and marital status with PPD

Residence, and religion were not found significant with PPD in this study. The results are similar to those reported in India by Aslam, et.al (2022) that found no significant association between PPD and whether a mother was staying in a rural or urban setting and the religion of the mother. These findings differ from those by Abayneh S, et.al (2016) that found occupation and residence as significantly associated with PPD. This variance can be attributed to the differences in population that all these studies were carried out. The variance can also be attributed to the difference in social norms in some of these countries. The study found no significant association with Level of education and occupation of the participants. These results are similar to those found in studies by Singh, (2020), Basu S, (2021) and Jija D, (2019) which also found no association between education levels and occupation with PPD.

In this study, there was no association between rural and urban residence with PPD and this is similar to another study by Milgrom J, (2008), however this differs from studies done in developed countries (Zarghami M, 2019; Azad R, 2019) like Australia that report high PPD rates in Urban areas compared to those in rural areas.

Other studies in the India and Iran reported higher PPD risks among women in rural areas (Goker A, 2012; Savarimuthu R et.al, 2010). These variances could be due to the differences

in the geographical aspects between urban and rural areas in developed countries, this could be further due to the heavy populations in urban areas characterized by low support tendencies and lower health levels as compared to rural areas

Obstetric factors associated with PPD

Parity was among the obstetric factors associated with PPD in this study, mothers who had given birth to one child were more likely to develop PPD. This is potentially because of the new experiences and challenges that motherhood presents to women. Unlike multiparous who already have experiences of dealing with the anxieties following child birth and infant nursing challenges, new mothers struggle to cope with these challenges and are more likely to be depressed in case of poor support. These findings are similar to a study carried out in Kampala (Juliet EM, 2006), Kenya (Esther W et.al, 2022), and (Agnafors S, 2019) in Kampala Uganda that found that young women having their first children are three times more likely to develop PPD (OR=3.0; 95% CI=1.42–6.30). Other studies didn't find any significance between Parity and PPD and this can be attributed to the differences in age groups between this study which targeted young women (18-24) and other studies that included all women in the reproductive ages

In this study, the type of delivery was also significantly associated with PPD, participants who had cesarean section were more likely to suffer from PPD especially for the first two months after delivery compared to those with normal vaginal delivery. This is attributed to pain involved after a cesarean during postnatal period. This is further attributed to the difficulties in breastfeeding for these young women who are already battling other nursing responsibilities. These findings are similar to those in a study done by Nelson DB (2013) and Adeyemo. Et.al (2020) though they differ from another study done in Japan that found no association between type of delivery and PPD. This could be because of the differences in the support structures in different cultures

The study found recent pregnancy being planned or not as a significant factor associated with PPD. Young women who never planned their pregnancies were at a higher risk of developing PPD. This finding is similar to those made in other studies (Esther W et.al, 2022; Barton K et.al, 2017). This can be explained by the fact that pregnancy is a stressful experience that can lead to stigma, loneliness and feeling of loss of opportunities and these require a prepared mind which young women who never plan for their pregnancies never have.

Mothers who reported Pregnancy complications in this study were more two times at risk of developing PPD compared to those who never had complications during pregnancy and childbirth. This is finding is similar to that found in other studies (Adeyemo, et.al, 2020; Martins Nweke, 2022). This can be attributed to the fact that pregnancy complications are life threatening complications and can lead to stressful periods for the mothers

Number of pregnancies, history of miscarriage/stillbirth, and place of birth were not found significant in this study. However several studies found history of miscarriages and stillbirths

associated with PPD (Jill W, 2021). This was attributed to the anxiety and fears among women that they might lose their children again. The variances between this study and those that found significance between number of pregnancies and history of miscarriages/stillbirths with PPD can be attributed to the level of counseling that women accessed and hope for better outcomes during the previous pregnancy

Child related factors associated with PPD

Infant sex preference by the mothers was a significant factor associated to PPD among the participants, mothers who gave birth to a different sex to that they desired were five times higher at risk of developing PPD. This is consistent with studies done in Ethiopia, Uganda and India (Getu E et.al, 2022; Shewasinad S, 2018). This could be probably further influenced by the lack of proper support from families that preferred a different gender compared to that a mother gives birth to and this stresses these mothers. Another study in the United States showed just a subtle association between gender preference and PPD (Blau F, 2017). More research is required in the area of gender preference and its association to PPD.

The study found that mothers whose children were ill were three times more at risk of developing PPD. These results are similar to those found in a systematic review done by Abel F (2020) that found an association between infant health and PPD. This is potentially due to the stress resulting from nursing their sick child and this caused a lot of discomfort to them. This could also results from feelings of guilt and the baby crying more than normal.

This study found no significant association between feeding of baby and the PPD, this was similar to another study done by Amipara T (2020) that also found no association. Another study deferred with this finding (Dennis, 2007) which found that feeding of the baby has an association with PPD on grounds of breastfeeding problems and duration of feeding by the infant. Another study found that women who are diagnosed with PPD were more likely to provide supplements earlier than those without depression. Having a baby who is not feeding well can also lead to PPD

Social support related factors associated with PPD

Support provided by partners was significantly associated with PPD. Mothers who didn't receive support from their spouses during pregnancy and the postnatal period were twice at risk of suffering from PPD. This is similar to findings made by another study done by Misri (2000) that found that women who receive all aspects of support from their partners are less likely to develop postnatal depression.

In the study, access to professional mental healthcare was also associated with PPD. Mothers who accessed professional mental health support including postnatal counselling and therapy sessions were less likely to suffer from PPD compared to those who didn't have access. This is because they were able to get professional advice to deal with the stress and anxiety tendencies that come with motherhood. These findings were similar to those is in others studies. (Nakku, 2016; Ester W, 2022)

The study didn't find any association between other the support provided to participants by family members and in-laws with PPD. Conversely, other studies have found significant associations with social support. (0. Other studies found significant associations of PPD with women who stay with their in-laws. (Wang y, 2017). These variances are greatly influenced by the kind of relationships that these mothers have with their family and in-laws; those who have friendly connections and relate well with their family and in-laws are less at risk of developing PPD compared to those with strained relations.

Psychosocial factors related PPD

In the study, mothers who suffered depression symptoms during their last pregnancy were two times at risk of developing PPD. This finding is similar to those found in a systematic review done by Iris A (2019) which found an association with PPD. Other studies didn't find any association with depression during pregnancy and PPD. These variances could be attributed to different social support systems that that different mothers access and the influence that these systems have on the psychological wellbeing

The study also found that mothers with a history of psychological disorder were 2.93 times at risk of developing PPD compared to those who have never suffered from any psychological disorders. These findings are similar to those made by Lindsley (2022) that found the same association. A study done by Tadesse, et.al (2020) also found that mother with a history of a psychological disorder were 4times at risk of developing PPD. This finding can be explained by the fact that pregnancy and childbirth brings about stress, anxieties and other emotional imbalances that can easily trigger depression and past psychological disorders. This implies that women who have histories of psychological disorders require a lot of support.

This study didn't find any significant relationship between family histories of psychological disorders as PPD among the participants. However several studies have found significant association between family history of psychological disorders and PPD (Anna E et.al, 2019; R Hymas, 2019). The differences in findings can be attributed to the difference in settings in which these studies were carried especially in terms of the support accessible for the women following childbirth.

5.2 Conclusion

This study set out to assess the prevalence of postpartum depression and the associated factors among young women aged 18-24 years in Wakiso District. The conclusions are drawn in line with each of the study objectives.

The study established that the prevalence of postpartum depression among young women in Wakiso District is 33.5%, indicating a substantially high burden of maternal mental health challenges within this population. This finding underscores that postpartum depression is a significant public health concern among young mothers and may be under-recognized within routine postnatal care services.

The study found that socio-demographic characteristics, particularly employment status and marital status, influence the occurrence of postpartum depression. Young women who were unemployed or not in stable marital relationships appeared more vulnerable, likely due to increased financial dependency and reduced social support systems. These findings highlight the role of socioeconomic vulnerability in shaping maternal mental health outcomes.

Several obstetric and child-related factors were significantly associated with postpartum depression. These included unplanned pregnancy, cesarean section delivery, and pregnancy-related complications. Additionally, child-related factors such as the health status of the baby and whether the mother achieved her preferred sex of the child were also significant. These findings suggest that both the experience of pregnancy and childbirth, as well as postnatal child outcomes, play a critical role in influencing maternal psychological wellbeing.

The study further established that social and psychological factors are strong predictors of postpartum depression. Low partner support and limited access to professional mental health services significantly increased the likelihood of developing postpartum depression. Furthermore, a history of depression during pregnancy, prior psychological disorders, and the presence of social or financial challenges were strongly associated with postpartum depression. These findings emphasize the importance of both emotional and structural support systems in mitigating maternal mental health risks.

Overall, postpartum depression among young women in Wakiso District is highly prevalent and influenced by a complex interplay of socio-demographic, obstetric, child-related, social, and psychological factors. The findings demonstrate the need for integrated, multi-sectoral approaches that address not only clinical care but also the broader social determinants of maternal mental health.

5.3 Recommendations

Relating to the findings made by the study; the following recommendations are made on the improvements of mental health services to support young women deal with PPD

To the District health Officer (DHO)

- Integrate comprehensive mental health support services into postnatal care provided by health workers during provision of postnatal services
- Train health workers on provision of customized psychological support to young women to support them deal with child birth related challenges that may be new and unique to them

To Non-Governmental Organizations/Civil Society Organizations

- Provide more funding on the creation of awareness about PPD within communities and encourage community people to support nursing mothers so that they are not put at risk of PPD
- Complement government in provision of psychosocial support to nursing mothers especially young women who might not be able to receive customized services in general hospitals

Researchers

- Conduct and document more studies on the different variables that are associated to PPD. An in-depth understanding of each variable and all aspects that it puts young women at risk of PPD should be documented and disseminated

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AI; Questionnaire

PREVALENCE OF POSTPARTUM DEPRESSION AND ITS ASSOCIATED RISK FACTORS AMONG YOUNG WOMEN (18-24) IN WAKISO DISTRICT

I..... who is signing below, has been informed of the purpose and aims of the study and I freely agree without any form of coercion to participate in the study and to give the correct information for the good of the study

Signature.....

Section One: Demographic Characteristics	
Age	
How old were you when you married	
Residence	City..... Village.....
Level of Education	<input type="radio"/> No Education <input type="radio"/> Primary <input type="radio"/> Secondary <input type="radio"/> University/Tertiary
Occupation	Tick what applies <input type="radio"/> House wife <input type="radio"/> Employed <input type="radio"/> Self Employed <input type="radio"/> Other (Specify).....
Family Income (Please state the amount of all earning persons in the family)	
How do you describe your family's income	Tick what applies <input type="radio"/> Very poor

	<ul style="list-style-type: none"> <input type="radio"/> Poor <input type="radio"/> Average/satisfactory <input type="radio"/> Good <input type="radio"/> Very good
<p>Section Two: Obstetric Factors</p>	
<p>1. Pregnancy and Birth History</p> <p>1.1. How many pregnancies have you had including the last one</p> <p>1.2. How many births have you had including the last one</p> <p>1.3. How many miscarriages/stillbirths have you had (if any)</p> <p>1.4. How many live babies/children do you have</p>	<ul style="list-style-type: none"> <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 and more <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 and more <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 and more <input type="radio"/> None <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4

	<ul style="list-style-type: none"> ○ 5 and more
<p>During your last pregnancy, what of the following pregnancy related problems occurred to you</p>	<p>Tick what applies</p> <ul style="list-style-type: none"> ○ Gestational hypertension or eclampsia ○ Gestational diabetes ○ Bleeding during pregnancy ○ Threatened abortion ○ Premature labor or birth ○ Severe dizziness or vomiting ○ Anemia
<p>Where did your last birth take place</p>	<ul style="list-style-type: none"> ○ Government Hospital ○ Private hospital ○ Community/TBA ○ Other (Specify).....
<p>The last delivery was</p>	<ul style="list-style-type: none"> ○ Normal Vagina Delivery ○ Caesarean Section
<p>Vaccum Assisted delivery was used</p>	<ul style="list-style-type: none"> ○ Yes ○ No
<p>Did you want to have the last pregnancy</p>	<p>Yes</p> <p>No</p>
<p>Did you plan with your husband to have the</p>	<p>Yes</p>

last pregnancy	No
How do you rate your satisfaction with the medical care during your last delivery	Poor Satisfactory Good Very good Excellent
In general, do you have the following diseases	Hypertension Diabetes Asthma Cardiac disease Rheumatoid arthritis Other (Specify).....
Section three: Newborn related factors (these questions are related to your baby)	
Newborn gender	Male Female
You wished your baby was	Male Female No difference
The newborn's weight	2.5kgs 2.5kgs-4kg Above 4kgs

<p>Does you baby have any disease</p>	<p>No</p> <p>Yes</p> <p>If yes, specify.....</p>
<p>Was your baby admitted into the neonatal ICU after birth</p>	<p>Yes</p> <p>No</p>
<p>Was your baby born before 9 months of pregnancy</p>	<p>Yes</p> <p>No</p>
<p>What do you use to feed your baby</p>	<p>Breastfeeding</p> <p>Formular</p> <p>Both</p>
<p>Section four: Marital and Family relationship factors</p>	
<p>How do you evaluate you marital life and your relationship with your partner</p>	<p>Very poor</p> <p>Poor</p> <p>Satisfactory</p> <p>Good</p> <p>Very good</p>
<p>How do you evaluate the help and support provided by your partner</p>	<p>Very poor</p> <p>Poor</p> <p>Satisfactory</p> <p>Good</p> <p>Very good</p>

<p>How do you evaluate your relationship with other family members (mother, father, sisters, brothers)</p>	<p>Very Poor</p> <p>Poor</p> <p>Satisfactory</p> <p>Good</p> <p>Very good</p>
<p>How do you evaluate your relationship with your in laws</p>	<p>Very poor</p> <p>Poor</p> <p>Satisfactory</p> <p>Good</p> <p>Very good</p>

Maternal Social Support Scale (MSSS)

For each of the following statements, please tick one box which shows how you feel about the support you have right now

	Always	Most of the time	Some of the time	Rarely	Never
A. I have good friends who support me	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
B. My family is always there for me	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
C. My husband/partner helps me a lot	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
D. There is conflict with my husband/partner	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
E. I feel controlled by my husband/partner	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
F. I feel loved by my husband/partner	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1
TOTAL SCORE					<input type="text"/>

Section six; psychosocial factors and psychological history

<p>Have you ever suffered or a been told by a physician that you have a mental illness</p>	<p>Yes</p> <p>No</p> <p>Don't know</p>
<p>Has any member of you family suffered from any mental illness or psychological disorder</p>	<p>Yes</p> <p>No</p> <p>Don't know</p>
<p>Have you suffered from depression during your last pregnancy</p>	<p>Yes</p> <p>No</p> <p>Don't know</p>
<p>During the last year or during your last pregnancy, have you experienced any of the following</p>	<ul style="list-style-type: none"> <input type="radio"/> Abandon a dear one <input type="radio"/> Workplace problems <input type="radio"/> Recurrent verbal humiliations or abuse <input type="radio"/> Separation from husband or divorce <input type="radio"/> Housing problems or change <input type="radio"/> Sever illness or you or a dear person <input type="radio"/> Hitting or physical abuse <input type="radio"/> Difficulties dealing with your children <input type="radio"/> Financial difficulties <input type="radio"/> Accidents or injuries <input type="radio"/> Death of a dear person
<p>Section six: Edinburgh Postnatal Depression Scale (EPDS)</p> <p>ABOUT THE EPDS</p>	

Studies show that postpartum depression (PPD) affects at least 10 percent of women and that many depressed mothers do not get proper treatment. These mothers might cope with their baby and with household tasks, but their enjoyment of life is seriously affected, and it is possible that there are long term effects on the family. The Edinburgh Postnatal Depression Scale (EPDS) was developed to assist health professionals in detecting mothers suffering from PPD; a distressing disorder more prolonged than the “blues” (which can occur in the first week after delivery). The scale consists of 10 short statements. A mother checks off one of four possible answers that is closest to how she has felt during the past week. Most mothers easily complete the scale in less than five minutes. Responses are scored 0, 1, 2 and 3 based on the seriousness of the symptom. Items 3, 5 to 10 are reverse scored (i.e., 3, 2, 1, and 0). The total score is found by adding together the scores for each of the 10 items. Mothers scoring above 12 or 13 are likely to be suffering from depression and should seek medical attention. A careful clinical evaluation by a health care professional is needed to confirm a diagnosis and establish a treatment plan. The scale indicates how the mother felt during the previous week, and it may be useful to repeat the scale after two weeks.

INSTRUCTIONS FOR USERS

1. The mother checks off the response that comes closest to how she has felt during the previous seven days.
2. All 10 items must be completed.
3. Care should be taken to avoid the possibility of the mother discussing her answers with others.
4. The mother should complete the scale herself, unless she has limited English or reading difficulties.
5. The scale can be used at six to eight weeks after birth or during pregnancy.

Dear Madam;

Since you are either pregnant or have recently had a baby, we want to know how you feel. Please place a CHECK MARK (✓) on the blank by the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**—*not just how you feel today*. Complete all 10 items and find your score by adding each number that appears in parentheses (#) by your checked answer. This is a screening test; not a medical diagnosis. If something doesn't seem right, *call your health care provider regardless of your score*.

1. I have been able to laugh and see the funny side of things:

As much as I always could ____ (0)

Not quite so much now ____ (1)

Definitely not so much now ____ (2)

Not at all ____ (3)

2. I have looked forward with enjoyment to things:

As much as I ever did ____ (0)

Rather less than I used to ____ (1)

Definitely less than I used to ____ (2)

Hardly at all ____ (3)

3. I have blamed myself unnecessarily when things went wrong:

Yes, most of the time ____ (3)

Yes, some of the time ____ (2)

Not very often ____ (1)

No, never ____ (0)

4. I have been anxious or worried for no good reason:

No, not at all ____ (0)

Hardly ever ____ (1)

Yes, sometimes ____ (2)

Yes, very often ____ (3)

5. I have felt scared or panicky for no good reason:

Yes, quite a lot ____ (3)

Yes, sometimes ____ (2)

No, not much ____ (1)

No, not at all ____ (0)

6. Things have been getting to me:

Yes, most of the time I haven't been able to cope at all ____ (3)

Yes, sometimes I haven't been coping as well as usual ____ (2)

No, most of the time I have coped quite well ____ (1)

No, I have been coping as well as ever ____ (0)

7. I have been so unhappy that I have had difficulty sleeping:

Yes, most of the time ____ (3)

Yes, sometimes ____ (2)

No, not very often ____ (1)

No, not at all ____ (0)

8. I have felt sad or miserable:

Yes, most of the time ____ (3)

Yes, quite often ____ (2)

Not very often ____ (1)

No, not at all ____ (0)

9. I have been so unhappy that I have been crying:

Yes, most of the time ____ (3)

Yes, quite often ____ (2)

Only occasionally ____ (1)

No, never ____ (0)

10. The thought of harming myself has occurred to me:*

Yes, quite often ____ (3)

Sometimes ____ (2)

Hardly ever ____ (1)

Never ____ (0)

Total Score.....

AII; CONSENT FORM

PREVALENCE OF POSTPARTUM DEPRESSION AND ITS ASSOCIATED RISK FACTORS AMONG YOUNG WOMEN (18-24) IN WAKISO DISTRICT

Greetings, I am Nyinawumuntu Dorothy from Uganda Christian University. I am working on this research project entitled **PREVALENCE OF POSTPARTUM DEPRESSION AND ITS ASSOCIATED RISK FACTORS AMONG WOMEN IN WAKISO DISTRICT**

Purpose of the study

The purpose of the study is to collect information on the PREVALENCE OF POSTPARTUM DEPRESSION AND ITS ASSOCIATED RISK FACTORS AMONG YOUNG WOMEN (18-24) IN WAKISO DISTRICT. You are being asked to participate in this study because you have particular knowledge and experiences that may be important to the study.

There are no risks to your participation in this study and your feedback will be beneficial to the study and the improvement Maternal and Newborn health for women in Uganda

What participation Involves

If you agree to participate in this study the following will occur:

1. You will sit with the researcher and have a conversation about you're your experience during pregnancy and after childbirth; the conversation will be guided by a questionnaire which you will fill with the guidance of the researcher
2. You will be interviewed only once for approximately I and half hours in a private setting.
3. No identifying information will be collected from you during this interview.

Confidentiality

I assure you that all information collected from you will be confidential. Only individuals working with me in this research will have access to the information. We will be compiling a report, which will contain your responses without any reference to individuals. We will not put your name or other identifying information on the records of information you provided. You may refuse to answer any particular question and may stop the interview at any time.

Right to withdraw and Alternatives

Taking part in this study is completely your choice. If you choose not to participate in the study or if you decide to stop participating in the study you will not get any harm. You can stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdraw from the study will not involve penalty or loss of any benefits to which you are otherwise entitled.

Benefits

There is no monetary or any form of compensation for your participation in the study. The information you provide will be beneficial in assessing the prevalence of PPD and understanding the risk factors associated to PPD among women in postnatal period.

Risks

We do not anticipate any harm from participating in the study

In Case of Injury

We do not anticipate that any harm will occur to you or your family as a result of participation in this study.

Who to contact

If you ever have questions about this study, you should contact Principal Investigator, Dorothy on....

Research Ethics violation;

In case of ethical issues pertaining this research or questions about your rights, contact UCUREC chairperson; Prof. Peter Waiswa, 0772405357, pwaiswa@musph.ac.ug or UCUREC Manager; Mr. Osborn Ahimbisibwe, 0775737627, oahimbisibwe@ucu.ac.ug

Agreement of the Participant

Do you agree to participate in the study?

I have read and understood the contents in this form.
My questions have been answered. I agree to participate in this study.

Signing below means that you have read this form and that you are willing to be in this study

Signature of participants

Signature of Principal Researcher.....

Date of signed consent

AIII; CONSENT FORM (LUGANDA VERSION)

PREVALENCE OF POSTPARTUM DEPRESSION AND ITS ASSOCIATED RISK FACTORS AMONG YOUNG WOMEN (18-24) IN WAKISO DISTRICT

Nkulamusiza ko, nze Nyinawumuntu Dorothy okuva mu Uganda Christian University. Nkola ku pulojekiti eno ey'okunoonyereza eriko omutwe **“PREVALENCE OF POSTPARTUM DEPRESSION AND ITS ASSOCIATED RISK FACTORS AMONG YOUNG WOMEN (18-24) IN WAKISO DISTRICT**

Ekigendererwa ky'okunoonyereza kuno

Ekigendererwa ky'okunoonyereza kwe kukungaanya ebikwatta ku mbela yo kwenyamila mu bakyala abakamala okuzzala mu disitulikiti y'e Wakiso. Osabibwa okwetaba mu kunoonyereza kuno kubanga olina okumanya okwenjawulo okuyinza okuba okwenjawulo mu kunoonyereza kuno. Tewali bulabe bwonna mu kwetaba kwo mu kunoonyereza kuno era endowooza yo ejja kuba ya mugaso eri okunoonyereza n'okutumbula ebyobulamu n'eddembe ly'okuzaala nemu by'okwegatta eri abawala mu Uganda

Okwetaba mu kunoonyereza kuno Kizingiramu

Singa okkirizza okwetaba mu kunoonyereza kuno bino wammanga bijja kubaawo:

1. Ojja kutuula n'omunoonyereza era mubeere n'embooji ku by'ewayitamu mu byo kuzzala wamu nakassela nga omalilizza okuzzala
2. Ojja kubuuzibwa omulundi gumu gwokka okumala nga eddakyika assatu emu n'ekitundu ky'essaawa mu mbeera ey'ekyama.

3. Tewali bikwata ku muntu bijja kukuŋjaanyizibwa okuva gy'oli mu mbooji eno.

Obwekusiffu

nkukakasa nti amawulire gonna agakung'aanyiziddwa okuva gy'oli gajja kuba ga kyama. Abantu ssekinnoomu bokka abakola nange mu kunoonyereza kuno be bajja okufuna amawulire ago. Tugenda kuba tukung'aanya lipoota, eja kubaamu eby'okuddamu byo awatali kwogera ku bantu ssekinnoomu. Tetujja kuteeka mannya go oba ebikukwatako ebirala ku biwandiiko by'amawulire ge wawadde. Oyinza okugaana okuddamu ekibuuzo kyonna era oyinza okuyimiriza yintaviyu essaawa yonna.

Eddembe ly'okuggyayo olukussa

Okwetaba mu kunoonyereza kuno kwa kyeyagalile ddala. Bw'osalawo obuteetaba mu kunoonyereza oba bw'osalawo okulekera awo okwetaba mu kunoonyereza tojja kufuna bulabe bwonna. Osobola okulekera awo okwetaba mu kunoonyereza kuno ekiseera kyonna, ne bw'oba nga wawadde dda okukkiriza kwo. Okugaana okwetaba oba okuva mu kunoonyereza tekijja kuzingiramu kubonerezebwa oba okufiirwa emiganyulo gyonna gy'olina okufuna mu ngeri endala.

Emigaso

Tewali ssente oba ngeri yonna ya kuliyirirwa olw'okwetaba kwo mu kunoonyereza. Amawulire g'owaayo gajja kuba ga mugaso mu kutegeera ku bikwatta ku kwenyamila kwabakya oluvanyuma lwokuzzala

Obulabe

Tte ttusuubira bulabe bwona okuvva mu kubuzibwa kunno

Mu mbeera y'obuvune

Tetusuubira nti obulabe bwonna bujja kukutuukako oba ku famire yo olw'okwetaba mu kunoonyereza kuno.

Ani gw'olina okutuukirira

Bw'oba olina ekibuuzo ku kunoonyereza kuno, ojja tuukirira Omunonyelezza owo kuntikko Dorothy ku namba ye ssimu....

Okumenya empisa z'okunoonyereza;

Singa wabaawo ensonga z'empisa ezikwata ku kunoonyereza kuno oba ebibuuzo ebikwata ku ddembe lyo, tuukirira ssentebe wa UCUREC; Prof. Peter Waiswa, 0772405357, pwaiswa@musph.ac.ug or UCUREC Manager; Mr. Osborn Ahimbisibwe, 0775737627, oahimbisibwe@ucu.ac.ug

Okukkaanya kw’Omwetabamu

Okiriza okwetaba mu kunoonyereza?

Nze..... nsomye era ne ntegeera ebirimu mu kyiwandiko kyino. Ebibuuzo byange biddiddwamu. Nzikiriziganya okwetaba mu kunoonyereza kuno.

Okussa omukono wansi kitegeeza nti osomye foomu eno era nti oli mwetegefu okubeeramu kunoonyereza kuno

Omukono gw’abeetabye mu kunoonyereza kuno

.....

Omukono gw’Omunoonyereza Omukulu

.....

Olunaku lw’okukkiriza okuteekebwako omukono

.....

AIV; WORK PLAN

ACTIVITY	March	April	May
Writing the research proposal			
Submission for REC approval and receiving feedback			
Data Collection			
Data Analysis and Final Report writing			

Submission defending report(Viva)	and the			
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AV; STUDY BUDGET

Budget Item	Quantity	Unit Cost	Total Cost	Justification
Development of electronic questionnaire	Lump sum	500,000	500,000	Programmer to program the questionnaire
Training for research assistants	Lumpsum	500,000	500,000	Going through the questionnaire with research assistants
Facilitation for research Assistant	4*5	150,000	2,000,000	To facilitate the data collection process
Data analysis	Lump sum	500,000	500,000	To help in the data analysis process
Incidentals	Lump sum	100,000	100,000	To cater for any eventualities during the study
Total			3,600,000	