POSTPARTUM DEPRESSION AND ASSOCIATED FACTORS AMONG MOTHERS: THE CASE OF NIFAS SILK LAFTO SUB CITY WOREDA 1 AND 2 HEALTH CENTERS

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES

SCHOOL OF PSYCHOLOGY

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JUNE, 2016

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THIS THESIS IS SUBMITED TO THE SCHOOL OF PSYCHOLOGY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR MA DEGREE IN COUNSELING PSYCHOLOGY.

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This Is To Certify That The Thesis Prepared By Habrasa Teshome In Titled With Postpartum Depression And Associated Factors Among Mothers:

The Case of Nifas Silk Lafto Sub City Wereda 1 And 2 Health Centers And Submitted In Partial Fulfillment of The Requirements For The Degree of Masters of Arts(Counseling Psychology) Compiles With The Regulations of The University And Meets The Accepted Standards Approved By The Examining Committee.

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ACKNOWLEDGEMENT

My heartfelt thanks and appreciations to my Advisor Daniel Tefera for his professional advice and professional guidance till the completion of this thesis.

I sincerely want to thank Dr. Dawit Wondimagegn, Associate Dean of Addis Ababa University, Department of Psychiatry, for his advice and professional guidance.

I would also like to thank Dr. MarkosTesfaye, Associate Dean of Jima University, Department of Psychiatry, for his help with materials.

Lots of gratitude to my family, friends and all many others not mentioned here, I extend many thanks and God bless you.

I convey my heartfelt thanks to sample respondents of the study for their collaborative support and genuine response while I was conducting this study.

ABSTRACT

The purpose of this study is to determine the prevalence and associated factors of postpartum depression among mothers in Nifas Silk Lafto Sub City, Woreda 1 and 2 health centers. Participants were recruited from the postnatal clinic at Nifas Silk Lafto Sub City, Woreda 1 and 2 health centers. Eligible participants were approached and requested to consent voluntarily to participate in this study. Data was collected using a structured questionnaire and analyzed using SPSS version 20.0 software. A total of 300 postnatal mothers were recruited in this study but 295 were analyzed. This study found a prevalence of postpartum depression at 45th day since delivery at 27.8% using K-10 score. 34% of the postnatal mothers were aged between 26-32 years. 82% were married and 27.8% were high school complete. 78% were not in any form of employment. 39.8% were primigravida or first time mothers.33.6% pregnancy was unplanned. Unemployment (r=0.8,P< 0.001), parity (r=0.7,P< 0.01), Income (r=0.7,P< 0.0001) and social support (r=0.7,P< 0.001) were statistically significantly associated with Postpartum Depression. No significant statistical association between Infant sex (r=0.48,P<0.05) and postpartum depression was found. It is important for the public to be aware of the magnitude of the postnatal depression. Health professionals are to be trained in this field to be able to recognize the symptom of postpartum depression, Routine screening of postnatal mothers and ministry of health is to formulate policies integrating mental and reproductive health.

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List of Abbreviation

APA: American Psychological Association

DSM-IV: Diagnostic and Statistical Manual of Mental Disorder-Forth Edition

HICs: High Income Countries

ICD-10: International Classification of Disease-Tenth Edition

LAMICs: Low and Middle Income Countries

PPD: Postpartum Depression

PND: postnatal depression

UNICEF: United Nations Children's Fund

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Appendix I: Questioner of the Socio-demographic Characteristics of Study Participants
Appendix II: Kessler-10 Postpartum Depression Screening Scale
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CHAPTER ONE

INTRODUCTION

1.1. BACKGROUND

The World Health Organization (WHO) has proposed that there can be no health without mental health (2005). Depression is one of the major cause of disability (Mathers & Loncar, 2006).Furthermore, depression is increasing, affecting 121 Million people worldwide and is predicted to become the fourth leading cause of the global disease burden by 2020 (Balch, 2006). Depression is a disabling disorder with symptoms such as low mood, lack of energy and interest, poor concentration and suicidal ideation (Dossett, 2008). Women have been found increased risk of depression during the perinatal period, which includes pregnancy (antepartum) and the first twelve months following delivery (Postpartum) (Dossett, 2008; Gavin, 2005). The prevalence of postpartum depression in low-income countries tend to be higher than in high-income countries (Patel, Rodrigues & De Souza, 2002; Rahman, Iqbal, & Harrington, 2003) and often goes unrecognized and untreated (Oxman & Sengupta, 2002; Patel, De Souza & Rodrigues, 2003). Postpartum depression is a significant public health issues that not only impacts maternal wellbeing, but also family cohesion and infant growth and development (Fisher, Cabral De Mollo & Izutsu, 2009).

Postpartum depression, also known as postnatal depression, is a non-psychotic depressive disorder of variable severity and it can begin as early as two weeks after delivery and can persist indefinitely if untreated. The illness can cause distress and impairs a mother's ability to carry out her normal tasks, care for herself and care of her baby (Beck, 2006; Lanes, Jennifer & Hala, 2011).

Although the American psychological association (APA) defines the 'postpartum period' as four weeks after childbirth, most researchers consider this too limiting, as depressive episodes influenced by the major life adjustment of having a child can continue for months after the birth (Beck & Driscoll, 2006). Whilst one third of women who develop postnatal depression may experience symptoms in the first four weeks, two third will develop them between ten and fourteen weeks, and cases that present later are often misdiagnosed (Kleinman, 2006). According

to DSM- IV and ICD -10 criteria, postnatal depression can last for any length of time between two weeks and one year postpartum, and is differentiated from normal postpartum emotional adjustment by the pattern of symptoms, and the severity and consistency with which they occur (Gibbon, 2004).

Postpartum depression represents a largely undetected form of maternal morbidity and the reason is that women may also be reluctant to disclose their feeling of depression for fear of stigmatization and fear that their depressive symptoms might be determined as evidence of being a "bad mother" (Gold, 2002). Different Studies show that, much emphasis is given to mothers' health after child birth and this hardly addresses the postpartum condition of the mothers, which is also true for Ethiopia. Mothers in Ethiopia experience many health threatening conditions after child birth (Hanlon, 2012). Maternal depression has been reported recently as risk factors for child mortality in Ethiopia, but in the presence of intimate partner violence (Deyessa, Berhane, & Emmelin, 2010).The relatively high prevalence of maternal depression in low-and middle-income countries may be related to women's exposure to multiple depression-related risk factors (Dhanda & Nareyan, 2007).

Experience indicates that postpartum depression is amongst the many threatening factors that many mothers experience after child birth (Hanlon, Araya, Tesfaye &Wondimagegn, 2008). Much emphasis has been placed on the antenatal health than the postnatal health and more on the physical than the mental health of the mother in the developing countries (APA, 2002).

Based on the onset and the severity of postpartum mood disorders, it is divided into three categories: firstly, postpartum blues, also known as maternity blues, which affects up to 80% of postnatal mothers It may start as early as two days and last for about two weeks. Symptoms include: irritability, anxiety, moodlability, sleep disturbance and crying spells. These symptoms are usually mild and they resolve with supportive care (Dennis & Stewart, 2004). Persistence of the maternity blues for more than two weeks may predict PPD (Lamonde, 2006). Secondly, postpartum depression is a non-psychotic depressive disorder that extends into postpartum period up to twelve months after delivery (APA, 2002). It consists of any or a combination of the following symptoms: sleeping and eating disturbance, mental confusion, loss of self-esteem, poor concentration and memory, fatigue and irritability, inadequate and unable to cope with the infant, lack of interest in one's environment, insecurity and suicidal thoughts, (APA,2002;

Evans, Heron& Patel, 2007). Some women may worry excessively about the baby's health or feeding habits and see themselves as "bad", inadequate, or unloving mothers (Robinson, 2001). Thirdly, postpartum psychosis is the severe form of the mood disorders. Mothers are severely impaired and suffer from hallucination, delusions and agitation (Evans, Heron & Patel, 2007). Generally it develops within the first four weeks after delivery. It is dangerous and often requires that the mother be hospitalized as there is increased risk of infanticide and or suicide (APA, 2002; Evans, Heron & Patel, 2007).

Intervention and treatment of postpartum depression requires education and screening (Dennis & Srewart, 2004). Communities as well as individuals must be educated in regard to risk factors, symptoms and causes of postpartum depression (Dennis, 2004). Education about mood disorders begins with awareness and is possible in prenatal clinics and media (Dennis & Creedy, 2004). The role of family members in helping new mothers gain rest and support and education regarding depression should be a routine part of every patient's antenatal care (Backer, 2002). Health care providers require more in depth knowledge relating to the screening, identification, and interventions of postpartum depression and recognition of symptoms and intervention early in the pregnancy may improve postpartum outcomes (Beck & Driscoll, 2006). Screening will provide a baseline so that subsequent depression will be recognized (Backer, 2002). Once a diagnosis of postpartum mood disorder is made, it is important to include mother's partner, family or friends during intervention (Beeber, 2002). Support group and family care giving are very important following child birth and they can assist the mother in need of resources such as child care and household assistance (Backer, 2002).

Early detection of these postpartum disorders is one of the major challenges in dealing with the problems and their complications. All postnatal mothers are susceptible in developing postnatal depression following childbirth (APA, 2002). However, women who have one or more of the symptoms of the mental illness increase the risk of developing Postpartum Depression and mothers who present with potential risk factors should be screened for symptoms during pregnancy and throughout the postpartum period (APA, 2002).

Clinical depressions in general and postpartum depression in particular, often go undetected and undertreated in the primary care setting (Gold, 2002). The health care providers

do not perform any assessment for postpartum depression as part of postpartum care. The target women, therefore, seem not to have getting restorative services related to postpartum depression. It was observed that even though mothers made frequent visits to health professionals after child birth, they barely showed their emotional situations. It was evidenced that the health centers of the study hardly address postpartum depression. According to the information obtained from both health centers, they do not have counseling centers, which are believed to treat both the pre and post-delivery problems mothers usually face; except carrying out checkup for normal pregnancy and delivery. This appears to have given fertile ground for the problem to remain unobserved.

It is most uncommon to hear women visiting the health facilities with emotional problems in the study area for the obvious reasons that: firstly, women lack awareness of the problem and degree of its effects; secondly, they are not encouraged by the health professionals because the problem is not embraced as important health issue and there is no relevant professional to bring forward the emotional problems they experience after delivery; thirdly, they are ashamed-by the fear of exclusion and stigmatization. Even though mothers have various interactions with health professionals in the post-partum period, they are frequently unwilling to disclose emotional problems (Brown & Lumley, 2000). Psychosocial factors are highly influential in the cause and progression of prenatal mental health disorders (Fisher, 2012; Hanley, 2009). Poverty and socioeconomic disadvantage is widely associated with postnatal depression in low and middle income countries (Fisher, 2012).

The quality of the marital relationship as related to PPD has received considerable attention and marital problems may render the partner more vulnerable to depression (O'Hara, 1996). Poor marital relationship increases the wife's vulnerability to depression (O'Hara, 1991). Unplanned pregnancy has also been found to be an influential psychosocial factor in predisposing a woman to postpartum depression (Wolf, 2002). Social support has been shown to be an important variable in stress disorder relationship as a mediating factor (Milgrom, 1999). A lack of practical as well as emotional support by the husband or partner, family members and friends plays a significant role in the development of PPD (Cutrona & Troutman, 1986). Social support may facilitate coping with the physical and emotional effects of childbirth as well as with the demands of caring for a newborn infant (Cutrona & Troutman).

1.2. Statement of the problem

Postnatal depression is a significant public health issues that not only impact maternal wellbeing, but also family cohesion, and infant growth and development (Fisher, Carbal & Izutsu, 2009). It is associated with maternal disability, which affects the care giving capacity of mothers for their infants (Fisher, Carbal & Izutsu, 2009). Little is known about the prevalence of postpartum depression in Ethiopia (Araya, Hanlon, Tesfaye & Wondimagegn, 2008). As postnatal distress is associated with negative family cohesion and child outcomes, this is an important area for research. By the same gesture, woreda 1 and 2 health centers of Nifas Silk Lafto sub city make no intervention regarding postpartum depression. Maternity services have traditionally managed the physiological processes of child bearing and are separated from mental health services with no interaction between the two, except in the referral of complex cases.

It appears that this is one of the problems which is least attended to and usually remains undiagnosed. It was learnt that even if such emotional problems happened to be brought to the health centers, the accustomed treatment procedure is such that patients are usually referred to Emanuel Psychiatric Hospital, instead of appropriate counseling centers. Needless to say such counseling centers are indeed rare in the country as the problem has not yet received adequate attention. Skilled professionals seem to be lacking and the women who suffer from postpartum depression hardly report their problem to the health centers. Thus postpartum depression remains unattended psychosocial problem in the study area because of inadequate attention paid to it by both the health centers and mothers who experience postpartum depression. To the knowledge of the researcher, there is no study done specifically on postpartum depression in the study area. Thus this study is designed to determine the prevalence of postpartum depression and its associated risk factors.

1.3. Research Questions

1. What is the prevalence of postpartum depression among mothers who gave birth over the Last 45th days in Nifas Silk Lafto Sub City, Woreda 1 and 2 health centers?

2. What are the associated factors of postpartum depression among mothers who gave birth over the last 45th days in Nifas Silk Lafto Sub City, Woreda 1 and 2 health centers?

3. What knowledge and Practice is held about postpartum depression among health workers in woreda 1 and 2 health centers in Nifas Silk Lafto Sub City, Woreda 1 and 2 health centers?

1.4. Significance of the study

The transition to mother hood can be a stressful time in the lives of women and brings with it a number of major life change. Apart from the physiological changes, the birth of a baby has an emotional impact on the mother. Mood disturbance represents the most frequent form of maternal mental illness in the postpartum period. Pregnancy itself, the process of child birth and difficulties of child care are risks of developing PPD. Postpartum depression is recognized only when behavioral change is grossly abnormal, while mild and moderate are not recognized by the health professionals indicating a gap of knowledge and practice. When not recognized while the mother is in the hands of maternity staff, the magnitude of subsequent severe morbidity is never known by them as the opportunity to make diagnosis is missed. Thus health workers need to be involved in the diagnosis of postpartum depression as they are highly involved in management of pregnant and postnatal mothers. Screening for postpartum depression would improve the ability to recognize these disorders and hence necessitate enhanced care that ensures appropriate clinical outcomes. Furthermore, the study would contribute to the body of knowledge on maternal mental health and it is expected to sensitize the health workers and policy makers on the importance of maternal mental health and the need for routine screening for PPD.

1.5. Operational Definitions

Postpartum depression: Severe than postpartum blues that can occur any time in the first year of delivery. Symptoms include mental confusion, loss of self-esteem, poor concentration & memory, lack of interest & unable to cope with the infant.

Low Self-esteem: feeling of unworthy and incapable as well as incompetent by the mothers.

Unwanted Pregnancy: is the pregnancy that is unintended and mistimed.

CHAPTER TWO

LITRATURE REVIEW

2.1. The nature of postpartum depression

. Symptoms and diagnosis of postpartum depression

The perinatal period brings many changes driven by the emotional process of child birth and adjustment to parenthood. Though most often linked to happiness, such changes can increase the risk of mood disturbance and psychiatric morbidity. Perinatal mental health disorder can be divided in to pre-existing mental health problems such as antenatal depression, and postnatal mental health problems such as 'the baby blues' (first two weeks postpartum), ' postnatal depression' (up to one year postpartum) and the most serious 'postpartum psychosis' (Gibbon, 2004).Postpartum depression is more severe than the baby blues, which is tearfulness experienced up to 80 % of women within two weeks, and is more highly influenced by insomnia and hormonal adjustment (Beck, 2006).

Although the American psychological association (APA) defines the 'postpartum period' as four weeks after childbirth, most researchers consider this too limiting, as depressive episodes influenced by the major life adjustment of having a child can continue for months after the birth(Beck & Driscoll, 2006). Whilst one third of women who develop postnatal depression may experience symptoms in the first four weeks, two third will develop them between ten and fourteen weeks, and cases that present later are often misdiagnosed (Kleinman, 2006). According to DSM- IV and ICD -10 criteria postnatal depression can last for any length of time between two weeks and one year postpartum, and is differentiated from normal postpartum emotional adjustment by the pattern of symptoms, and the severity and consistency with which they occur (Gibbon, 2004). Even though not classified as a distinct syndrome, the ICD-10 classifies depression after child birth as "mild (four symptoms), moderate (five symptoms), or severe (five symptoms or more, plus agitation, feeling of worthlessness or suicidal thought)" (Fisher, Cabral, & Izutsu, 2009). Around 15% of cases of PND have an antenatal onset, and without proper detection and treatment, around one third of PND develop in to chronic clinical depression (Gibbon, 2004). Similarly, two to seven percent of women will suffer severe depression requiring psychiatric inpatient treatment after child birth (Fisher et al., 2009). Meanwhile,

women who suffer from an episode of PND are twice as likely to experience future episodes of depression over a five year period (Dennis, 2004). 1.1.2.

2.1.1. Causes of Postpartum Depression

The cause of postnatal depression is physical, psychological, and social factors associated with the transition from pregnancy to new motherhood. Like other mental illness, postpartum depression has many interconnected causes. These are genetic predisposition to depression, a period of environmental stress or a combination of both (Miller, 2002). The major life changes associated with the transition to motherhood are obvious postnatal potential stressors and also cause emotional fragility (Beck & Driscoll, 2006).

2.1.2. Effects of postpartum depression

When a woman develops postpartum depression, her partner can react with confusion and anger. Men sometimes withdraw or feel blamed during this emotional time. Postpartum depression has also found to cause problems with family integration (Fishel, 2004). Similarly, Leopold and Zoschnick (2003), state that a mother functionally impaired by depression places a significant emotional burden to the family unit and relationships. When the mother's income was previously used to support the family, depression can place a significant financial burden on the family unit as well.

The women with postnatal depression commonly experience extreme fatigue and feeling overwhelmed with the responsibilities of child care as well as irritability and an inability to feel love towards their baby, which fuels subsequent guilt and self-blame (Beck & Driscoll, 2006). Similarly, the disruption of mothers-infant interaction associated with an episode of postnatal depression has a long term impact on child development (Maggi, Irwin, Siddiqi, & Hertzman, 2010). Meanwhile, Mensah and Kiernan (2010) found that children of depressed mother has lower attainment at primary school in communication, literacy, mathematics and emotional and social skills, as well as more violent episodes, anger management problems and attention deficit hyperactivity disorder (Beck & Driscoll, 2006; Magnusson, 2011).Impaired maternal functioning due to postnatal depression has been connected to more frequent infant illness and growth impairment, as well as less concern for the child's home safety (Fisher, 2009). A women's skill as a mother becomes impaired as she suffers through the symptoms of PPD. Effective mothering

is a public health concern, and health care providers must understand conditions such as PND that adversely affect a women's ability to care for infants (Logsdon, Wisner & Pinto, 2006).

Through daily interactions with their mothers, infants learn about their external environment (Logsdon, Wisner & pinto, 2006). A mother with postnatal depression fails to complete these tasks as the weight of her emotional burden can become too heavy (Logsdon, Wisner & Pinto, 2006). Ideally, a mother will develop sensitivity to her infant and smile, talk, touch, and kiss her infant. She will come to understand the infant's sleep/wake cycle, attention span, and response to stimuli and reflexes which will increase her maternal confidences (Logsdon, Wisner & Pinto, 2006). A woman with PND has a hard time interacting with her infants and may have fears of being left alone with her infant (Killien, 1998).

The stress from a mother's PND symptoms puts more emphasis on the father caring for the infant (Goodman, 2008). Maternal PND affects fathers in negative ways, as evidenced by higher levels of depression and parent stress (Goodman, 2008). Some men with partners diagnosed with PND have reported in increasing stress and fatigue associated with the demand from their new role (Letourneau, 2012). Some have feelings of anger and resentment towards their partner as they attempt to cope with the demands of their mental illness, along with an infant and possibly other children, along with employment commitments (Letourneau, 2012).These feelings negatively affect father-infant interactions, as maternal mood influence the interaction (Goodman, 2008). Postnatal depression can adversely affect marital quality (Letourneau, 2012). In fact, marital dissatisfaction is a strong risk factor for maternal and paternal depression (Letourneau, 2012).These marital difficulties can be associated with poor communication, less interaction with their children, feeling of being overwhelmed, isolated, stigmatized and frustrated (Letourneau, 2012).

2.1.3. Social Support from Intimate Partner

Women's relationship with her husband or intimate partner is one of the most influential social determinants of postnatal depression (Fisher, 2010; Hanley, 2009).Mothers who have supportive, nurturing intimate relationships have lower rates of maternal mental disorder (Fisher, 2010). Conversely, poor intimate relationship or marital dissatisfaction is recognized as powerful risk factors for postnatal depression (Beck & Driscoll, 2006). Single parenthood has also been linked

to postnatal depression; however this association is complex and dependant on the quality of the relationship with the baby's father while he was present, and what other social support is available to the mother (Brockington, 2003).

2.1.4. Social Support from Family Members

The quality of support from relatives other than one's partner can influence postnatal depression (Brockington, 2003). Luck of familial support is a more influential predictor of postnatal depression than is luck of material support in many countries (Fisher, 2010). Family support is most useful if it assists the mother to feel comfortable and does not undermine her feelings of self-esteem and maternal competence (Kendall, 2007). In many low and middle income countries, including Ethiopia, husbands and parents are usually the main source of social support for a woman in the postnatal period, and many women return to their own mother's house for months following the birth of their child (Rice, 1999). This strong sense of family identity provides many benefits for postnatal wellbeing such as increased practical help (Rice, 1999; Tomlinson, 2004). Facilitating social support for first time mothers in the postpartum period is an important component of the role of Nurses (Lee & Lederman, 2004).

2.1.5. Maternal Depression in High-Income Countries (HICs)

Postnatal depression is a significant public health issues that not only impact maternal wellbeing, but also family cohesion, and infant growth and development (Fisher, Cabral, & Izutsu, 2009). Within high-income countries (HIC), approximately 10-20% of mother of newborn are thought to experience depression, although rates vary within and between countries (Patel, Rahman, & Holton, 2012). From the study done in the United States, the prevalence was found 7%-26% (Ray & Hodnett, 2002); and 17%-37% in Canada (Lanes, Jennifer, & Hala, 2011).

Studies from high-income countries have reported the association between maternal depression and disturbances in mother-child interactions (Lovejoy & O'Hara, 2000), negative perception of infant behavior (Foreman & Henshaw, 2002), and an increased likelihood of infant being perceived as temperamentally difficult (Edhborg, Seimyr, Lundh, & Widstrom, 2000). Negative and low care giver responsiveness may contribute to high rate of insecure attachment

found among infant of depressed mothers (Martins & Garffan, 2000). Children of depressed mother are also at risk for slower cognitive development (Preston & Scaramella, 2006).

In high-income countries, treatment for maternal depression commonly includes antidepressant drugs, combined with psychological interventions (APA, 2002). Providing social support can also reduce the risk of subsequent maternal depression (Dennis & Creedy, 2004). Although maternal depression can be successfully treated, residual consequences to mother-child interaction or children's cognitive and social-emotional development often persist (Forman, O'Hara, Stuart, & Larson, 2007). Treatment programs that include mother-infant interactions have reported gains in both the quality of mother-infant interactions and child functioning (Nylen & Moran, 2006).

2.1.6. Maternal Depression In low-and middle Income Countries (LAMICs)

Depression is the most common mental health condition to affect perinatal women and mothers worldwide. Evidence from Low-and Middle-Income Countries indicates that depression in postnatal period is at least as prevalent as in high income countries (Fisher & Patel, 2012). Maternal depression is an enormous, neglected public health problem in Low-and middle-income countries (Hanlon, 2012). Although nearly 90% of the worlds' children live in low-and middle-income countries (United Nations Children's Fund, 2004), we know little about the prevalence of maternal depression (Patel, Araya, & Bolton, 2004) or the consequences on children's health, development, and behavior in these countries (Rahman, Harrington, & Bunn, 2002).

2.2. Risk Factors for Postnatal Depression

The moderate risk factors of postpartum depression symptoms were ante partum depression, low self-esteem, poor marital relationship, history of previous depression and maternity blues (Beck, 2001). The small factors encompassed low socio economic status, being a single parent and having unwanted pregnancy (Beck, 2001). The strongest etiological association was found with the level of support, particularly from the spouse and the mother (O'Hara & Swain, 1996). In Low income countries, poverty does feature more strongly, as do specific aspects of support that are culturally related. Ante partum depression, unwanted pregnancy, poverty and son preference are the identified associated factors for postpartum depression in Asian culture (Klainman & Arthur, 2009). Low income, son preference, difficult relationship with parents, adverse life events during pregnancy, and luck of physical help were found to be

risk factors in India (Chandran, Tharyan & Abraham, 2002). The other associated factors for postpartum depression in low income countries (Pakistan, Zimbabwe & South Africa) are low level of education and being a house wife (Patel & Rahman, 2003). Poor education is consistent risk factor in developing postnatal depression (Patel, 2002). Many potential etiological factors have been implicated in the development of postpartum depression, including, psychological and psychosocial factors.

2.2.1. Psychological Theories

Psychological factors have been perceived by many researchers in playing a major role in postpartum depression. Psychological theories of postpartum depression have included behavioral and cognitive models.

2.2.2. Psychosocial Theories

Psychosocial theorists who argue that the occurrence of stressful life events, such as loss of a loved one, marital difficulties and financial difficulties may precipitate the onset of depression (Hopkins, 1987). According to social stress theorists, depression is more likely to arise with the occurrence of major stressor (Atkinson & Rickel, 1984). Psychosocial stress theory of postpartum depression perceives child birth as a major stressor that disrupts usual living patterns, thereby forcing them to implement new behavioral patterns (Atkinson & Rickel, 1984). Two theories of why postpartum depression occurs are discussed in this thesis: One emphasizes the stress that arises from the demand of the pregnancy and child birth; and the other one emphasizes the mother's cognitive behavioral coping mechanisms.

2.2.3. Theories of stress and coping

The stress and coping theories postulate that depression in general, and in the postpartum period, arises as a result of an imbalance between perceived demands (Social, Physical, or Marital) and perceived resources (from an appraisal of stressors and coping strategies) and social (based on situational characteristics and social support) (Lazarus & Folkman, 1998). Maternal cognitive style, including beliefs about one's own competence as a parent and appraisal of existing stressors has been posited as mediating factors on the effects of stress on postpartum adjustment (Cutrona & Troutman, 1996).

2.2.4. Cognitive-Behavioral Theories

Cognitive behavioral theories of depression consider dysfunctional thoughts and behavior to be the risk factors that precipitate, exacerbate, and maintain depression. The negative expectations about one's self, the world and the future lead to feeling of depression (Beck, 1996).

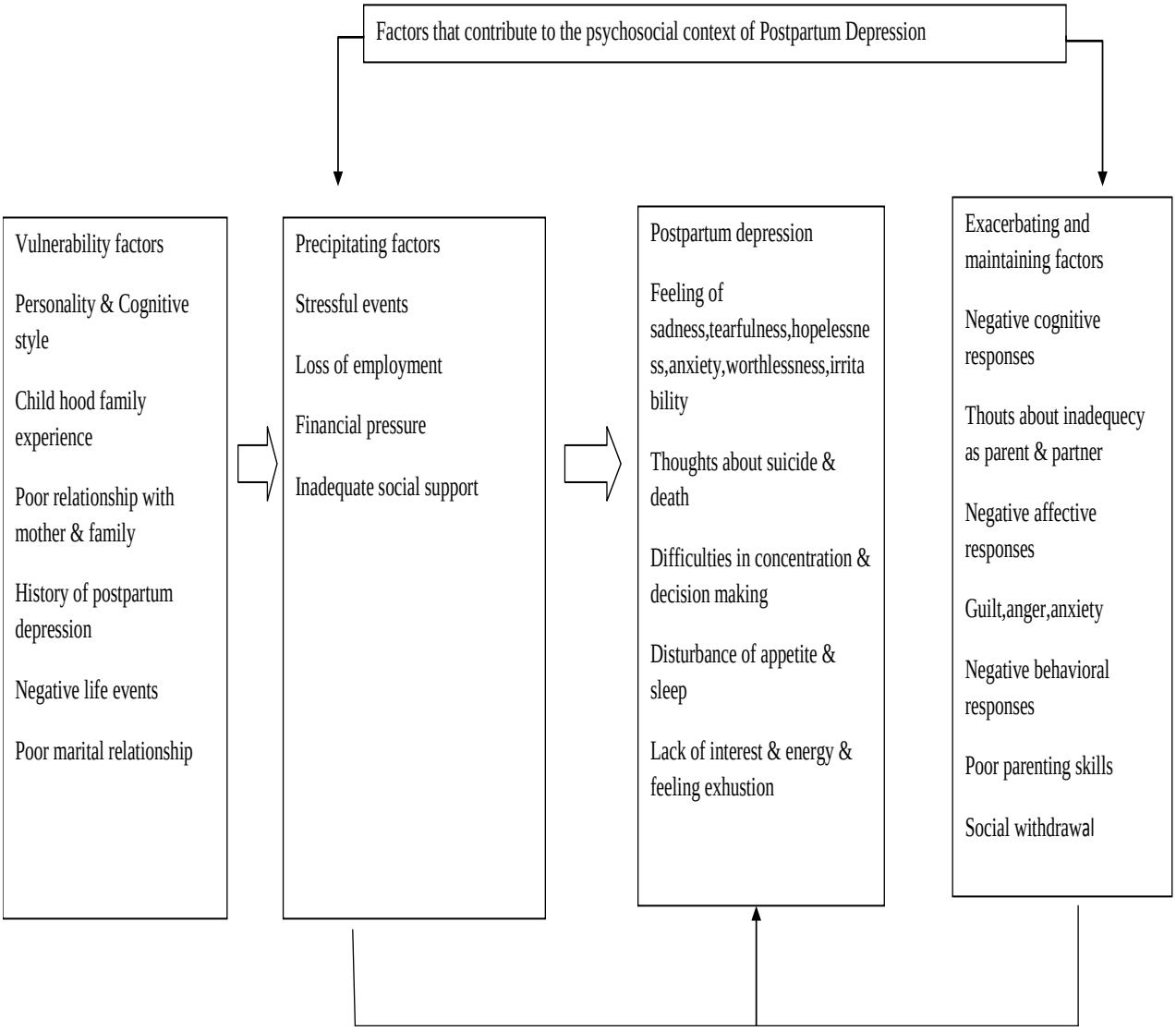
2.2.5. Theoretical Framework

The psychological and social factors must coexist to produce depression (Harris, 1996). Hence the theoretical framework of this thesis is based on the above two theories as described below.

2.6. Psychosocial Model of Postpartum Depression

Psychosocial model of postpartum depression presupposes using the link between psychological and social theories as described above to search for the risk factors of postpartum depression (Milgrom, 1999).

The sychosocial model of Postpartum Depression



On the left, vulnerability factors reflecting that some women are more susceptible to developing postpartum depression than others. These factors include both those present from early age, such as personality traits, and others that have come in to play, such s psychiatric disorders and negative life events. In addition, women and their significant others (partner, relatives, friends, etc.) may react to the postpartum depression in ways that maintain the disorder. Maternal hostility towards family and negative child rearing attitudes during pregnancy were associated with anxiety and depression at eight months postpartum (David & Holden, 1970).

Depression in pregnancy and postpartum may be emphasized when skill level become open to examination by professionals, family and friends (O'Hara, 1986).

Psychosocial factors impact postpartum depression through the pathway of precipitating and exacerbating factors (Garthus & Eskild, 2010). Guilt, self-esteem and feeling of inadequacy arise in response to postpartum depression when social myths falsely imply that the motherhood experience should be exclusively positive (Milgrom, 1999). In some societies, particularly in Asia and Africa, family connotes a center of honor, loyalty, and reputation and a large extended family is greatly appreciated (Halbreich & Karkun, 2006). Women are traditionally subordinate to male relatives; however they receive recognition, honor and substantial social support during 40-day social support period after childbirth (Klaiman & Arthur, 2009).

2.6.1. Prevalence and Risk Factors Associated With Maternal Depression

The prevalence of maternal depression varies across low-and middle-income countries (Halbreich & Karkun, 2006). From a study done in Uganda in a periurban primary care center, the prevalence of PPD at six weeks was 6.1% (Nakku, Nakasi, &Mirembe, 2006); in Soweto it was found 16.4% (Ramchandani, Richter, & Stein, 2009); Ghana 11.3% (Weobong, Akpalu, & Prince, 2007); in Nigeria 14.6% (Adewuya&Lawal, 2005); and in South Africa 34.7% (Cooper, Tomlinson, Swartz, &Molteno, 1999); 28%-57% in Pakistan (Kazi, Fatmi, &Kedir, 2006), and 35%-50% in Latin America (Wolf, Deandraca, &Lozoff, 2002). In the two Health Centers of Addis Ababa, Addis Ketema Sub City, the prevalence of PPD was found to be 19% and in rural Ethiopia Butajira it was found 17% prevalent (Hanlon, Araya, Tesfaye, &Wondimagegn, 2008) and also maternal depression has been reported recently as a risk factors for child mortality in Ethiopia, but in the presence of intimate partner violence (Deyessa, Berhane, &Emmelin, 2010).

The relatively high prevalence of maternal depression in Low-and middle-Income countries may be related to women's exposure to multiple depression-related risk factors (Dhanda & Nareyan, 2007). Although poverty and economic stress are associated with maternal depression in both high and Low income countries, the rate of poverty are much higher in Low and middle income countries (UNICEF, 2004). Many factors that contribute to maternal depression are common in LAMICs, including low social support (Kazi, Fatmi, &Kedir, 2006), social stigma (Husain, Creedy, & Tomenson, 2000), and lack of awareness by primary health

care workers that depression is a medical-mental health problem (Rodrigues, Patel, & Desouza, 2003).There is also culture related risks for maternal depression. In culture where there is a strong gender preference for boys, the birth of a girl may increase the risk of maternal depression (Ahmed & Khan, 2005).

Brief screening methods have been effective in identifying women with depressive symptoms in both high and low income countries (Arroll, Khin, &Kerse, 2003). However, utilization of screening is low and many women with depression are not identified. In LAMICs, women are generally treated by primary health care workers who may have limited training in the recognition and treatment of depression, little awareness of the serious nature of maternal depression, a heavy patient load, and few resources (Wang, Aguilar, Alonso, & Borges, 2007). Many women with depression in LAMICs receive no treatment. Antidepressant drugs used in high income countries are effective in LAMICs (Patel, Araya, Chisholm, Cohen, & Dasilva, 2007).Postpartum depression responds well to treatment. The treatment is determined based on patient's history, medical condition and current symptoms. Mild to moderate depression can be treated with psychological counseling and social interventions. Severe depression would benefit from antidepressant and the best mode of treatment is multimodal approach where both psychotherapy and pharmacotherapy are used (Discalea & Wisner, 2009).

CHAPTER THREE

METHODS AND PROCEDURES

3.1. Study Design

The study employs descriptive cross sectional study design in which 300 consenting postnatal mothers visiting the postnatal clinic at woreda 1 & 2 health centers in Nifas Silk Lafto Sub city, Addis Ababa on forty-fifth days of delivery were recruited.

3.2. Study Site

The area sampling was conducted based on purposive sampling where the criteria were relative density of postnatal mothers. Hence, the study was conducted on two health centers, woreda one and woreda two health centers in Addis Ababa, Nifas Silk Lafto sub city. These health centers serve the low income community. They provide non-complicated deliveries, antenatal and postnatal checkups, vaccination and family planning services.

3.3. Study Population

This study focuses on the mother's who came to vaccination clinic which is given at forty-fifth day after delivery. The forty-fifth day after delivery is an ideal time for screening postpartum depression. By this visit, many of the symptoms of PPD have begun to occur.

3.4. Study Participants

A total of 300 postnatal mothers were interviewed. 295 were eligible for analysis. Two was excluded because of age being below 18 years and three had incomplete data. From the mothers who visit woreda 1 & 2 health centers in Nifas Silk Lafto sub-city on their 45th day after delivery, (15th April-30th April, 2015), all mothers who came on their forty-fifth day since delivery were selected using availability sampling.

3.5. Data Collection Instrument

Data was collected using the Kessler-10 Psychological distress scale to determine the prevalence. Unstructured questionnaire was used for health professionals.

3.5.1. Instrument Description

Kessler-10 scale is 10 questions about non-specific psychological distress and seeks to measure the level of current and depressive symptoms a person may have experienced in the last four weeks. The values of the response categories are reversed: 5-all of the time to 1-none of the time. These 10 items are summed to get scores ranging from 10 and 50, where 50 indicate high risk of anxiety or depressive disorder. Patients who rate most commonly “some of the time” or “All of the time” categories are in need of a more detailed assessment. Referral information should be provided to these individuals. Patient who rate most commonly “A little of the time” or “None of the time” may also benefit from early intervention and promotional information to assist raising awareness of the conditions of depression and anxiety as well as strategies to prevent future mental health issues. The instrument was applied in an interview format and respondents were prompted to give examples and explain their answers. Questions 3 and 6 are not asked if the person answered ‘none of the time’ to the preceding questions.

3.5.2. Pretesting

The K10-scale was the already validated scale in Ethiopia by local psychiatrists and internal reliability Cranach’s alpha was 0.90. The instruments were pretested on 30 postnatal mothers attending vaccination clinic in Addis Ababa Nifas Silk Lafto Sub city woreda 1 and 2 Health Centers and 4.6% of the mothers were depressed.

3.6. Data Collection Procedures

After consent was taken, the data was collected every weekday because the clinic provides the vaccine every day except weekend.

3.6.1. Data Analysis

In the process of analyzing quantitative data, first simple descriptive statistics were used to establish overall patterns of distribution, central tendencies, and variations. Furthermore, bi-variate technique was employed using IBM Statistics SPSS (Statistical Package for the Social Sciences) version 20 for analysis and the following statistical analytical methods were employed, hence:

i. Bi-variate techniques were used as deemed fitting and all correlations and tests for variations were tested for statistical significance and reported when appropriate and a *P*-Value <0.05 was considered statistically significant.
ii. Pearson product moment correlation was used for measuring relations.
iii. Linear regression model was used for the association of the prevalence and associated factors.

3.6.2. Inclusion criteria

1.45th day since delivery

2. Live baby at the time of the study

Exclusion criteria

1. Age < 18years

2. Mothers more than 45 days since delivery

3.7. Ethical Consideration

Letter to conduct the study was obtained from Addis Ababa University School of Psychology. Subsequently, permission to carry out the study was sought from Addis Ababa Health Berou. Written informed consent was obtained from all participants after the purpose of the study was explained. Participation to this study was voluntary and there was no offering of refunds as the interview was conducted during normal clinic visit. Confidentiality was maintained for all obtained information and no names were written on the questionnaire.

CHAPTER FOUR

RESULT AND DISCUSSION

300 women who were forty-fifth days since delivery were surveyed using K-10 postpartum depression screening scale. Results were presented in tables.

4.1. RESULTS

4.1.1. Socio Demographic Characteristics.

The socio-demographic characteristics of the postnatal mothers were presented in table 1.

Table1: Socio-demographic characteristics of the postnatal mothers.

Variable items	Frequency N = 295	Percentage
Age in years		
19-25	42	14.2
26-32	101	34.2
33-39	99	33.6
40-49	53	18.0
Educational level		
Not literate	40	13.6
Primary	28	9.5
High school	82	27.8
Diploma	71	24.1
Degree and above	74	25.1
Marital status		
Single	49	16.6
Married	241	82.0
Divorced	4	1.4
Occupation		
Employed	61	21.7
Not employed	220	78.3
Monthly income		
1000	22	8.0
1100-2000	60	21.7
2100-2500	50	18.1
2600	144	52.2
Religion		
Christian	181	66.5
Muslim	91	33.5

The mean age of the sample was 34 (SD= 16) with the range of ages from 19-49 years old. For the highest level of education received, 82(27.8%) was a high school complete, 71(24.1%) was diploma graduate, 74(25.1%) had degrees and 40(13.6%) was illiterate. Two hundred and forty One (82%) of the mothers were married and forty nine (16.6%) were single. Other four (1.4%) were divorced. Two hundred and twenty (78.3%) of the mothers were unemployed and the rest sixty one (21.7%) were employed. The highest income they receive were two thousand and six hundred with the mean of 2189 (SD=1418).

Table 2: family size of the participants

Variable item	**F**	**%**
No of children		
1 child	117	39.8
2	88	29.9
children	68	23.1
3	21	7.1
children		
4-6		
children		
Gender of the last child		
Male	143	48.6
Female	151	51.4
Is the baby planned		
Yes	196	66.4
No	99	33.6
Partner support		
Yes	253	86.1
No	41	13.9

The number of children that the women already had living with them ranged from 1 children to 6 children, with a mean age of 2 child (SD=11). One hundred and ninety six (66.4%) of the pregnancies were planned and ninety nine (33.6%) of the pregnancies were unplanned. Two hundred and fifty three (86.1%) of the mothers had social support.

Socio-Demographic Characteristics

The women were aged between 19-49, with a mean age of 34 (SD= 16.86). The number of children that the women already had living with them ranged from 1children to 6 children, with a mean of 2 child (SD= 11). Two hundred and twenty (78.3%) women were unemployed. The household income ranged from 1000br-2600br with a mean of 2190 (SD= 1418). Two hundred and forty one (82%) women were married and the rest were single. Eighty two (27.8) women were high school complete and one hundred and ninety-six (66%) women said that their pregnancy were planned. Two hundred and fifty nine (86%) of the women said that they receive partner support. Finally, the sample was heterogeneous with regard to parity, with 39% of the sample being premiparous (first-time mothers) and the rest were multiparous.

Bi-variate Analysis between Postpartum Depression and Socio-demographic characteristics

Being unemployment (r= 0.8, p<0.001) and household income (r=0.7, P<0.0001) were significantly associated with postpartum depression. Educational status (r=0.7, P<0.001) and Social support (r=0.7, P<0.001) were also significantly associated with Postpartum depression. First time mothers (Primigravida) (r=0.7, P<0.01) was also significantly associated with postpartum depression. Planned pregnancy (r=0.16, P<0.05) and Infant sex (r=0.48, P<0.05) were not associated with Postpartum depression.

Prevalence of Postpartum Depression

Of the 295 mothers, 82(27.8%) (n= 82, M= 12, SD= 4.2) were found to be moderately depressed as measured by K-10 score. This study indicated that none of the women that came to the health centers for vaccination during the study time disclosed their emotional problems and received psychotherapy. This corresponds with global postpartum therapeutic condition which evidences that not many women do really go for such treatment. This study indicates that health care professionals are barely involved in the screening of postpartum depression as they are highly involved in management of pregnant and postnatal mothers. Not many studies have been done regarding the problem of postpartum depression however; the few works done in some parts of the country indicate that the prevalence of the problem is there. In the two health centers of Addis Ababa, Addis Ketema and Salam primary Health care centers, the prevalence of

postpartum depression was found to be 19% and also17% in rural Ethiopia, Butajira, (Hanlon, Araya, Tesfaye, & Wondimagegn, 2008).

The Pearson product movement correlation between the prevalence of postpartum depression and the psychosocial factors is r = 0.593 is significant al 0.01 alpha level. This indicates a relatively strong positive relationship between the two variables.

Table 3. **Correlations**

		SMEAN(Feeling)	SMEAN(Psy-fac)
SMEAN(Feeling)	Pearson Correlation	1	.593**
	Sig. (2-tailed)		.000
	N	295	295
SMEAN(Psycho-Fac)	Pearson Correlation	.593**	1
	Sig. (2-tailed)	.000	
	N	295	295

**. Correlation is significant at the 0.01 level (2-tailed).

Table4.Linear regulation models examining associated factors of postpartum depression.

Model Summary age

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.067[a]	.004	.001	5.68065

Model Summary educational status

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.423[a]	.179	.176	5.15856

model summary employment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.402	.162	.158	5.15419

Model Summary income

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.306[a]	.093	.090	5.50349

Model Summary martial status

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.439[a]	.193	.190	5.12081

Model Summary number of children

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.164[a]	.027	.023	5.62679

Model Summary planned baby

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.244[a]	.060	.056	5.52107

Model Summary financial support

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.471[a]	.222	.219	5.02076

The adjusted linear regression model shows that PPD was directly associated with financial support, employment, educational status and marital status and also adversely associated with age, number of children and planned pregnancy.

Table 5: Demographic characteristics of the health professionals

Variable Item	Frequency	%
Age		
22-26	15	29.4
27-30	19	37.3
31-35	14	27.5
≥36	3	5.9
Sex		
M	22	53.7
F	19	46.3
Educational status		
Diploma	17	34.0
Degree	33	66.0
Profession		
Nurse	18	35.8
Midwife	20	40.7
Health officer	11	23.5
Income		
1000-1500	2	4.0
1600-2000	6	12.0
2250-3100	28	56.0
4100 and above	14	28.0
Year of experience		
1-3	20	40.0
4-7	16	32.0
8-12	14	28.0

The table above shows the demographic characteristics of the health professionals.

37.3% of health workers were age between 27 to 30 and 22(53.7%) of them were male. 20(40%) of the health workers were midwives and 18(35%) were nurses. 20(40%) of the health workers in both health centers had an working experience of three years,

Table.6. Knowledge and Practice of health professionals about PPD

Item	**F**	**%**
Do you know about PPD		
Yes	49	98
No	1	2
Have you ever been trained on PPD		
No	50	100
Have you ever informed mothers about PPD		
Yes	18	37.3
No	32	62.7
Did any mother ever tell you about her mood Disorder		
Yes	2	4
No	48	96
Do you have screening tools		
No	50	100
Have you ever screened mother with depression		
No	50	100

The table above shows that 49(98%) of the health workers in both health centers knows about postpartum depression. None of the health workers have ever been trained on PPD. From all health workers in both health centers, 32(62.7%) never provide information based on PPD and there is no any screening tools of depression in both health centers and due to this, none of the mothers ever been screened for depression.

4.2. Discussion

There was significant relationship between PPD and demographic variables that were examined in this study. PPD was significantly associated with parity that is in first time mothers than mothers who had many children. The other demographic variable which is significantly associated with PPD is unemployment, lack of education, and socioeconomic status. Lower socioeconomic status consistent with research by Scannell (2001) was also associated with postpartum depression. This result suggests that women of lower socioeconomic status are more likely to be at risk for developing PPD than women of higher socioeconomic status. Therefore, these results are consistent with a psychosocial model in which socioeconomic status and unemployment causally influences postpartum depression.

This study was found that the prevalence of postpartum depression is 27.8% forty-fifth days of delivery at woreda 1 and 2 Health centers of N/S/L sub city, Addis Ababa using Kessler-10 cut-off score. This responses total scored within the range that indicated moderately depressed. This figure was consistent with result from the review of literature for incidence of postpartum depression with in South Africa 26%-34%. It is higher than 19% found by a study done at Addis Ketema and Selam Health centers in Addis Ababa. It is also higher than the 11.3% prevalence in rural Ghana. It is also higher than in Uganda that is 6.1% and in Lesotho which was 16.4%.It is higher than in the United State that is 26%. It is lower than the study in South Africa, which is 34%, and in Pakistan that is 57%. However, this result compares well with similar studies in LAMICs ranging from 10%-34.7%.

The review of the literature revealed variations among studies of the results for incidence of postpartum depression. The reason for these differences may be methodological differences such as different study design and different screening instruments. Further the prevalence obtained in this study could be an underestimate since some mothers may not have attended postnatal clinic especially if they felt like they were physically well. Studies in the review of literature indicated that using a screening tool is more effective than asking if a woman is having symptoms during the history and physical.

The psychosocial model of PPD denotes that socioeconomic factors contribute to the psychosocial context of depressive symptoms through moderating the stress events. Poor

household economic status or low socioeconomic status has emerged as one of the most significant determinants of PND in this study. The relationship between poverty (indicated by low level of education, low household income, and unemployment) and mental disorder have been elucidated in a recent review of studies from low and middle income countries (Patel & Kleinman, 2003). Poor education is a consistent vulnerability factor for maternal mental disorder (Patel & Kleinman, 2003).The positive effect of literacy was pronounced in this study on the outcome of PPD and is consistent with the findings from Brazil, Pakistan and South Africa (Patel & Kleiman, 2003). Social consequences of poor education are obvious: lack of education represents a diminished opportunity for person to access resources to improve their situation (Hussain, Creed & Tomenson, 2000).

women with low social support lack effective psychosocial resources including social stability and social participation, and therefore receive insufficient emotional and practical support from partner, family members and friends (Elsenbruch, 2007).The psychosocial model identifies 'lack of social support' as a stress moderating variable for the onset of depressive symptoms. A time of significant life change requiring major psychological adjustment, the perception and expectations of insufficient support clearly have a detrimental effect on maternal health (Horowitz & Goodman, 2004).This study identified practical support from the husband as protective against anxiety among postnatal women. This reflects the observations of other researchers that family/social support doing postnatal period plays a significant role in predicting women's emotional status in the postpartum period. This study has attempted to examine the cause of postpartum depression from a psychosocial perspective, in which postpartum depression is perceived to evolve from the interaction of Psychological, Social and Environmental factors.

The postpartum depression cross-sectional analysis of PPD revealed that those women who had depression in the postpartum period tended to feel unhappier about having a new baby in the family and women who had higher level of ppd also had poorer postpartum marital adjustment and lower level of postpartum social support.

CHAPTER FIVE

CONCLUSION AND RECOMENDATION

5.1. Conclusion

Pregnancy and child birth are times of social and psychological change for women. An understanding of the risk factors involved in predicting high levels of depressive symptoms in the postpartum period is critical in providing suitable intervention strategies, as well as in understanding the psychological processes involved. The present result has important implications for the identification of women who are at risk for developing depression during postpartum. Women who are from lower socioeconomic status, who feel unhappier about having their baby should be closely monitored for the development of depressive symptoms, poor marital adjustment and lower levels of social support in the postpartum are also important variables in predicting postpartum depression.

This study found prevalence of postpartum depression among mothers delivering at woreda 1 & 2 health centers of Nifas Silk Lafto sub city on forty-fifth day of delivery at 27.8% (moderate) which is a significant high value and compared well with other studies. None of the health professionals have been trained on maternal mental health and there is evidence that many women do not report symptoms of postpartum depression to their health care provider. There are no any screening tools in both woreda 1 and 2 health centers. Early detection and treatment of postpartum depression is crucial considering that numerous women are affected by perinatal mood disorders and suffer from its negative impact on themselves as mothers, their infants and their families. Mental and physical aspects of child and maternal health are interlinked, and that physical health cannot be achieved without consideration of mental health.

Women who develop symptoms of postpartum depression may receive earlier intervention if their partners are educated to recognize signs of depression and the significance of those signs. All childbearing families could be educated about symptoms, risk factors, preventive measures and were to obtain help. Women could be more likely to seek help for themselves if they understood the potential consequences of depression on themselves, their children and their partners. Primary care providers and professionals would need to collaborate for optimum outcomes. The findings of this study may form the bases for the need of screening of postpartum depression in the postnatal clinic. These would help prevent postnatal depression at all levels

hence a healthy mother. This study has important implications for the identification of women who are at risk for developing PPD and the implementation of primary intervention strategies.

5.2. Recommendation

It is important for the public to be aware of the magnitude of postnatal depression. This would create awareness among people about postnatal depression and alert health workers to take their time to recognize depression when dealing with postnatal mothers. Primary care providers and professionals, including pediatricians could collaborate for optimum outcome and should also be aware of the significant role of postpartum depression.

Routine screening of postnatal mothers, counseling either in the form of individual or group therapy, may be of assistance to women suffering from depression and health professionals is to be trained in this field to be able to recognize the symptoms of postpartum depression. Ministry of health should formulate a policy that integrates mental and reproductive health. Research examining the relationship between postnatal depression and child health in Nifas Silk Lafto health center is needed, while maternal mental health is currently a low priority in the health care practice of most Low and Middle Income Countries.

Future research should focus on the identification of those factors which may predispose women of lower socioeconomic status to be more at risk for developing depression during postpartum period. It might better establish the effectiveness and scalability of interventions for depression in community of Nifas Silk Lafto Sub City, which is important for framing maternal mental health as part of primary care. It should also include a replication of this study using a larger sample size from a more diverse population base. Research should also be done to compare and contrast rural and urban population. Health care providers should be surveyed to determine knowledge of the symptoms, effect and interventions for postpartum depression.

A number of programs integrating maternal and child health and mental health have been successful in reducing maternal psychiatric morbidity in both HIC and LAMICs. In South Africa, it was found that having a psychologists or nurse with mental health training available in antenatal clinics meant that pregnant women with emotional distress could receive counseling and referral immediately. This resulted in at risk women also being followed up postnataly, with the aim of addressing continuing maternal depression in a setting that promotes the overall wellbeing of mothers and children.

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Addis Ababa University

College of Education and Behavioral Studies

School of psychology

Dear study participants.My name is HabrasaTeshome a graduate student in the School of Psychology, Addis Ababa University. Currently I am conducting a study entitled **Postpartum Depression among mother of 45th day of delivery** as partial fulfillment of the requirement for MA degree in Counseling Psychology. I would like to request your consent to fill out this short questionnaire which will take approximately 10 minutes to complete. This questionnaire is aimed at gaining the prevalence of postpartum depression and the psychological consequences. As part of the research you would first respond to some questions about yourself and your employment status. All questionnaires are completed anonymously. **There is no need to write your name in any part of the questionnaire.** Whatever information you provide will be kept strictly confidential, and will not be shared with anyone without your consent.

Answer the questions with a check mark (√) in the box that best expresses your perception. Do not check more than one box per question. Please **answer ALL the questions** as truthfully as possible.

Appendix I

Socio- Demographic Data of the postnatal mothers.

1.age☐ Under 18 ☐ 25 – 29 ☐>35 ☐ 19 – 24 ☐ 30-34

2. Educational Status ☐ None ☐high school☐Degree and more☐Primary

☐ Diploma

3. Marital status☐Single ☐Married ☐Divorced ☐Widowed

4. Are you employed? ☐Yes ☐no

5. Monthly Income☐ ≤ 1000 ☐1100 -2000☐ 2100-2500 ☐>2600

6. Religion ☐Christian ☐ Muslim ☐Other

7. How many children do you have?

☐1 ☐ 3

☐ 2 ☐> 4

8. Gender of the last child?

☐Male ☐ Female

9. Is the baby planned? ☐ Yes ☐ No

10. Do you have financial support from the baby's father? ☐ Yes ☐ no

አዲስ አበባ ዩኒቨርስቲ

ኤጁኬሽን ኤንድ ብሄቨራል ሰተዲስኮሌጅ

የሳይኮሎጂ ትምህርት ክፍል

ውድ ተሳታፊዎች ስሜ ሀብራሳ ተሾመ ይባላል፡፡ በአዲስ አበባ ዩኒቨርስቲ ሳይኮሎጂ ትምህርት ክፍል የድህረምረቃ ተማሪ ነኝ፡፡ በአሁኑ ጊዜ የካውንስሊንግ ሳይኮሎጂ ማስተርስ ዲግሪ ከፊልመሙያነት እንዲሆን ከወለዱ45 ቀናት የሆናቸው እናቶች ድረወሊድ የድብርት ሁኔታን አስመልክቶ ጥናት እያካሄድኩኝ እገኛለሁ፡፡ስለዚህ ይህ በግምት10 ደቂቃ የሚወስድ አጭር መጠይቅ እንዲሞሉልኝ ፍቃድዎትን ለመጠየቅ እወዳለሁ፡፡ ይህ መጠይቅ የድህረወሊድ ድብርት እና ተያያዥነት ያላቸው የስነልቦናውጤቶችን አስመልክቶ መረጃ ለመሰብሰብ ያለመነው፡፡ እንደአንድ የምርምሩ አካል አስቀድመው ስለራስዎት እና የቅጥርዎ ሁኔታን አስመልክቶ አንዳንድ ጥያቄዎችን ይመልሳሉ፡፡ ሁሉም መጠይቆች ለየብቻ ይሞላሉ፡፡በማንኛውም የመጠይቅ ክፍል ላይ ስሞትን እንዲጽፉ አይጠየቁም፡፡ የሚሰጡት መረጃ በሚስጥር የሚያዝ እና ከእርስዎ ስምምነት ውጪ ለሌላ ወገን የማይሰጥ መሆኑን እናረጋግጣለን፡፡ የሚቀርቡሎትን ጥያቄዎች አስመልክቶ ስሜትዎን ለመግለጽ በሳጥን ውስጥ

የ ✔ ምልክት በማድረግ ይመልሱ፡፡እያንዳንዱን ጥያቄ ከአንድ ጊዜ በላይ አይመልሱ፡፡ እባክዎትን ሁሉንም ጥያቄዎች በተቻለ መጠን በእውነተኛመንፈስ ይመልሱ፡፡

ግላዊናማህበራዊመረጃ

1. እድሜ

☐ከ18 አመትበታች ☐25-29 35 እናከዚያበላይ☐

☐ከ19-24 30-34 ☐

2. የትምህርትደረጃ

☐ምንምአልተማርኩም ☐ ሁለተኛደረጃተምሬያለሁ

☐አስከ አንደኛ ደረጃ ተምሬያለሁ ☐ ዲፕሎማአለኝ

ዲግሪአለኝ ☐

3. የጋብቻሁኔታ ☐ አላገባሁም ☐ አግብቻለሁ ☐ አግብቼ ፈትቻለሁ

☐ ባለቤቴ ሞቶብኛል

4. ሥራአለዎት ☐ አለኝ ☐ የለኝም ☐

5. ወርኃዊገቢዎት

☐አንድሺናከዚያበታች ☐ከ1100-2000 ☐

ከ2100-2500 ከ2600ብርበላይ

6. ሃይማኖት ☐ ኦርቶዶክስ ☐ ፕሮቴስታንት ☐መስሊም ☐ካቶሊክ

7. ስንትልጆችአለዎት

☐ 1 ☐ 2 3 ☐ 4 እና ከዚያበላይ ☐

8. የመጨረሻልጅዎታ

☐ወንድ ☐ ሴት

9. በእቅድነውየወለዱት

☐ አዎ ☐ አይደለም

10. ከልጅዎ አባት የገንዘብ እርዳታ ያገኛሉ

☐አገኛለሁ አላገኝም ☐

Appendix II

Kessler-10 scale

These questions concern how you have been feeling over the past 30 days. Tick a

Box below each question that best represents how you have been.

1. During the last 30 days, about how often did you feel tired out for no good reason?

5. None of the time	4.A little of the time	3.Some of the time	2. Most of the time	1.All of the time

2. During the last 30 days, about how often did you feel nervous?

5. None of the time	4.A little of the time	3.Some of the time	2. Most of the time	1. All of the time

3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?

5. None of the time	4.A little of the time	3.Some of the time	2. Most of the time	1.All of the time

4. During the last 30 days, about how often did you feel hopeless?

5. None of the time	4.A little of the time	3.Some of the time	2.Most of the time	1. All of the time

5. During the last 30 days, about how often did you feel restless or fidgety?

5. None of the time	4. A little of the time	3. Some of the time	2. Most of the time	1. All of the time

6. During the last 30 days, about how often did you feel so restless you could not sit still?

5. None of the time	4.A little of the time	3.Some of the time	2.Most of the time	1. All of the time

7. During the last 30 days, about how often did you feel depressed?

5. None of the time	4.A little of the time	3.Some of the time	2.Most of the time	1.All of the time

8. During the last 30 days, about how often did you feel that everything was an effort?

5. None of the time	4.A little of the time	3.Some of the time	2.Most of the time	1.All of the time

9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up?

5. None of the time	4.A little of the time	3.Some of the time	2. Most of the time	1.All of the time

10. During the last 30 days, about how often did you feel worthless?

5. None of the time	4.A little of the time	3.Some of the time	2.Most of the time	1. All of the time

The Amharic version of the Kessler scale-10

1. በዚህ አንድ ወርውስጥ የመደበር (የመደበት) ስሜት ምን ያህል አዘወትሮ ይሰማዎት ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂት ጊዜያት2.እምብዛም አይሰማኝም

1.በፍጹም ተሰምቶኝ አያውቅም

2.በዚህ አንድ ወር ውስጥ እጅግ ከመደበትዎ የተነሳ ምንም ነገር ሊያስደስትዎ ያልቻለበት ወቅት ምን ያህል ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂት ጊዜያት2.እምብዛም አይሰማኝም

1.በፍጹም ተሰምቶኝ አያውቅም

3. በዚህ አንድ ወር ውስጥ የመጨነቅ ስሜት ምን ያህል አዘወትሮ ይሰማዎት ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂት ጊዜያት2.እምብዛም አይሰማኝም

1.በፍጹም ተሰምቶኝ አያውቅም

4. በዚህ አንድ ወር ውስጥ እጅግ ከመጨነቆ የተነሳ ምን ምነገር ሊያረጋጋዎት ያልቻለበት ወቅት ምን ያህል ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂት ጊዜያት2.እምብዛም አይሰማኝም

1.በፍጹም ተሰምቶኝአያውቅም

5. በዚህ አንድ ወር ውስጥ የመቁነጥነጥ ወይምበ እረፍት የማጣት ስሜት ምን ያህል አዘወትሮ ይሰማዎት ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂት ጊዜያት2.እምብዛም አይሰማኝም1.በፍጹም ተሰምቶኝ አያውቅም

6. በዚህ አንድ ወር ውስጥ እጅግ ከመቁነጥነጥዎ የተነሳ አንድ ቦታ መቀመጥ ያልቻሉበት ወቅት ምን ያህል ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂትጊዜያት2.እምብዛም አይሰማኝም1.በፍጹም ተሰምቶኝ አያውቅም

7. በዚህ አንድ ወር ውስጥ የዋጋቢስነት ስሜት ምን ያህል አዘወትሮ ይሰማዎት ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂት ጊዜያት2.እምብዛም አይሰማኝም1.በፍጹም ተሰምቶኝ አያውቅም

8. በዚህ አንድ ወር ውስጥ ያለበቂምክንያት ሊደክሞት የነበረው ምን ያህል አዘውትሮ ነበር□

5.ሁል ጊዜ4.አብዛኛውን ጊዜ3.ለጥቂት ጊዜያት2.እምብዛም አይሰማኝም1.በፍጹም ተሰምቶኝ አያውቅም

9. በዚህ አንድ ወር ውስጥ ተስፋ የመቁረጥ ስሜት ምን ያህል አዘወትሮ ይሰማዎት ነበር□

5.ሁልጊዜ4.አብዛኛውንጊዜ3.ለጥቂትጊዜያት2.እምብዛምአይሰማኝም1.በፍጹም
ተሰምቶኝ አያውቅም

10. በዚህ አንድ ወር ውስጥ ሁሉንም ነገር እየታገሉ ወይም የግድዎን እንደሚያደርጉ ሆኖ የተሰማዎት ምን ያህል አዘወትሮ ነበር□

5.ሁልጊዜ4.አብዛኛውንጊዜ3.ለጥቂትጊዜያት2.እምብዛምአይሰማኝም1.በፍጹም

Appendix IV

Questioners to be filled by health professionals

Knowledge and practices of health professionals about PPD

1. Age

22-25 26-30 31-35 >35

2. Sex M F

3. Educational status

Certificate Diploma Degree Masters and above

4. Profession nurse midwife health officer Medical Doctor

5. Income 1000-1500 1600-2000 2250-3100 4100 and above

6. Year of experience 1-3 4-6 7-10 >11

7. Do you know about postpartum depression? Yes No

8. Do you have any screening tools in this health centers? Yes No

9. Have you ever screen mothers with depression? Yes No

10. Have you ever inform pregnant or postnatal mothers about mood disorders? Yes No

11. Did any pregnant or postnatal mothers told you about her mood disorders? Yes No

12. Have you ever be trained about prenatal or postnatal depression? Yes No

13. Do you think that the availability of the screening tools is important? Yes No

14. Do you think that the screening tools would help mothers to preventing PPD? Yes No

Appendix V

Consent form

How are you? My name is _____.Am postgraduate student from the University of Addis Ababa, Department of Counseling Psychology. I am conducting a study on postpartum depression in mothers who are 45th days of delivery at the vaccination clinic here in woreda 1and 2 health centers.

General information

I have come to ask for permission from you to participate in this study. Am asking you to read (or have it read to you) this consent form carefully. Participation into this study is voluntary and you are free to or not accept to participate. There will be no any form of payments or rewards to be given to the participants. All the information you will give us will be treated with confidentiality and no names will be written on any form. You will also be asked to sign or thumb print in front of a witness to show that you have accepted by your own choice to take part in the study. This form may contain unfamiliar words, thus you may ask us to explain anything you cannot understand.

.

I, participant number _____having been informed about the study/having read all the above and understand all what it entails, do willfully without coercion consent to participate in the study.

_____ _____

Client signature/Thumb print Date

_____ _____

Investigator who informed/discussed with client Date

አባሪ

የሥምምነትቅጽ

እንዴትናችሁስሜ----------ይባላል እኔ የአዲስ አበባ ዩኒቨርስቲ ካውንስሊንግ ሳይኮሎጅ ትምህርት ክፍል ደህረ ምረቃ ተማሪ ነኝ፡፡

በወረ ዳ1 እና 2 ጤናጣቢያዎች ክትባት ክሊኒክ ውስጥ ከወለዱ 45 ቀን የሞላቸው እናቶች ድህረ ወሊድ ድብርት ሁኔታን አስመልክቶ ጥናት እያደረግኩኝ እገኛለሁ፡፡

አጠቃላይ መረጃ

በዚህ ጥናት ውስጥ እንዲሳተፉ ፍቃድዎትን ለመጠየቅ መጥቻአለሁ፡፡ ይህ የስምምነት ቅጽን በአግባቡ እንዲያነቡ ወይንም እንዲነበብልዎት እጠይቃለሁ፡፡ በዚህ ጥናት ላይ የሚደርጉት ተሳትፎ በፍላግትዎ ላይ የተመሰረት ነው፡፡ በጥናቱ ላይ መሳተፍን ሆኖ አለመሳተፍ ይችላሉ፡፡ በዚህ ጥናት ላይ ተሳታፊ በመሆንዎት የሚከፈልዎት ክፍያ ወይም ማበረታቻ አይኖርም፡፡ እርስዎ የሚሰጡን መረጃዎች ሁሉ በሚስጥር ይያዛሉ እንዲሁም በማንኛው ቅጽ ላይ የሚጻፍስም አይኖርም፡፡ በዚህ ጥናት ላይ ለመሳተፍ መምረጥዎን ለማሳየት በምስክርፊት አንዲፈርሙ ወይንም የአውራጣት አሻራ ፊርማ እንዲፈጽሙ ይጠየቃሉ፡፡ ይህ ቅጽ ያልተለመዱ ቃላትን ሊይዝ ይችላል፡፡

ስለዚህ ግልጽ ያልሆነልዎትን እናያልተረዱትን ነገር እንድናብራራሎት መጠየቅ ይችላሉ፡፡

እኔ አመልካች ቁጥር ---------- ሁሉም የጥናት ዝርዝር መረጃዎች ከተገለጹልኝ/ካነበብኩኝ በኋላ በጥናቱ ላይ ለመሳተፍ ያለምንም ግፊት በገዛፈቃዴ ተስማምቻለሁ፡፡

የደንበኛ ፊርማ/የአውራጣት አሻራ ቀን

ከደንበኛ ጋር ውይይት ያደረገው/ለደንበኛው ገለጻ ያደረገው መርማሪ ----------