RELATIONSHIP BETWEEN MATERNAL SELF-EFFICACY, SOCIAL SUPPORT AND MATERNAL DEPRESSION AMONG THAI ADULT MOTHERS WITH CHILDREN UNDER ONE YEAR OLD

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RELATIONSHIP BETWEEN MATERNAL SELF-EFFICACY, SOCIAL SUPPORT AND MATERNAL DEPRESSION AMONG THAI ADULT MOTHERS WITH CHILDREN UNDER ONE YEAR OLD

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ABSTRACT

Prevalence of maternal depression has become an important problem worldwide including Thailand. The purpose of this cross sectional study was to investigate the associations of maternal self-efficacy, social support with maternal depression. The sample comprised 285 mothers with children at age of below one year who attended the immunization clinic at pediatrics' out patient department at Samutsakhon Provincial Hospital. Data was collected using self-administrated questionnaires and self-report technique. Data analyses using Pearson's Product Moment Correlation Coefficient, Chi-square test and multiple regression analysis using Stepwise procedure were performed.

Results revealed that the factors that were significantly related to maternal depression, were education level ($r = .123$, $p = .038$), sufficient family income ($\chi^2 = 9.877$, $p = .007$), maternal self-efficacy ($r = -.135$, $p = .028$), social support ($r = -.171$, $p = .004$). After doing stepwise multiple regression analysis by controlling education level and sufficient family income, social support was found to be a good predictor ($R^2 = 9.5$, $p = .046$) of depression, while self-efficacy ($R^2 = 9.5$, $p = .051$) was not.

The results have shown that self-efficacy and social support are inversely related to maternal depression. It emphasizes the need of further study to find out role of maternal self-efficacy as mediator in reducing level of maternal depression.

KEY WORDS: MATERNAL DEPRESSION / SELF-EFFICACY / SOCIAL SUPPORT

93 pages

ความสัมพันธ์ ระหว่าง การรับรู้ความสามารถของแม่ในการดูแลลูก แรงสนับสนุนทางสังคม กับภาวะซึมเศร้าในแม่คนไทยวัยผู้ใหญ่ที่มีบุตรวัยแรกเกิดถึงหนึ่งปี
(RELATIONSHIP BETWEEN MATERNAL SELF-EFFICACY, SOCIAL SUPPORT AND MATERNAL DEPRESSION AMONG THAI ADULT MOTHERS WITH CHILDREN UNDER ONE YEAR OLD)

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บทคัดย่อ

ความชุกของภาวะซึมเศร้าในแม่เป็นปัญหาสำคัญในเกือบทุกประเทศทั่วโลก และ รวมถึงประเทศไทยด้วยวัตถุประสงค์ของการศึกษาแบบตัดขวางนี้เพื่อที่สืบหาความสัมพันธ์ ของ การรับรู้ความสามารถของแม่ในการดูแลลูก แรงสนับสนุนทางสังคม กับภาวะซึมเศร้าในแม่ ซึ่งกลุ่มตัวอย่างคือ แม่ที่มีอายุตั้งแต่ 20 ปีขึ้นไป ที่มีบุตรวัยแรกเกิดถึงหนึ่งปี ที่มารับบริการที่ คลินิกเด็กสุขภาพดีเพื่อฉีดวัคซีน ที่ตึกผู้ป่วยนอก โรงพยาบาลสมุทรสาคร เป็นจำนวน 285 ท่าน โดยการตอบแบบสอบถาม และการวิเคราะห์ข้อมูลใช้ ความสัมพันธ์ Pearson, วิธีทดสอบ Chi-square และ การวิเคราะห์ความถดถอยเชิงพหุ โดยใช้วิธี Stepwise

ผลการศึกษาพบว่า ปัจจัยที่มีความสัมพันธ์อย่างมีนัยสำคัญกับภาวะซึมเศร้า ได้แก่ ระดับการศึกษา ($r = .123$, $p = .038$), ความพอเพียงของรายได้ของครอบครัว ($\chi^2 = 9.877$, $p = .007$), การรับรู้ความสามารถของแม่ในการดูแลลูก ($r = -.135$, $p = .028$), แรงสนับสนุนทางสังคม ($r = -.171$, $p = .004$) หลังจาก ใช้การวิเคราะห์ความถดถอยเชิงพหุ โดยใช้วิธี Stepwise รวมถึงได้ควบคุม ระดับการศึกษาและความพอเพียงของรายได้ของครอบครัว พบว่า แรงสนับสนุนทางสังคมเป็น ตัวที่สามารถทำนาย ภาวะซึมเศร้าของแม่ ($R^2 = 9.5$, $p = .046$) ส่วน การรับรู้ความสามารถของตนเองไม่ใช่ ตัวที่สามารถทำนายภาวะซึมเศร้า ($R^2 = 9.5$, $p = .051$)

ผลการศึกษาแสดงถึงว่า การรับรู้ความสามารถของตนเอง และ แรงสนับสนุนทางสังคม มีความสัมพันธ์ แบบตรงข้าม กับ ภาวะซึมเศร้าของแม่ สิ่งที่ควรเน้นในการศึกษาครั้งต่อไปคือ การค้นหาว่าการรับรู้ความสามารถของแม่ มีบทบาทเป็นเหมือน Mediator ที่จะช่วยลดภาวะซึมเศร้าของแม่หลังคลอด

93 หน้า

CONTENTS

CONTENTS (cont.)

Page

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

WHO	:	World Health Organization
GBD	:	Global Burden of Disease.
SEARO	:	Regional for South- East Asia.
PPD	:	Postpartum Depression.
SICS	:	Self-efficacy in Infant Care Scale.
PRQ-85	:	Personal Resource Questionnaire
HRSR	:	Health-Related Self-Report
DALYs	:	Disability-Adjusted Life Years.
YLDs	:	Years Lives with Disability
WHO-AIMS:		World Health Organization-Assessment Instrument for Mental Health System

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CHAPTER I
INTRODUCTION

1.1 Rationale and justification

1.1.1 Global situation of mental health

In recent years, the World Health Organization (WHO) has highlighted mental health as a major public health problem. Mental health disorders make a sizeable contribution to the Global Burden of Disease (GBD) (1). The GBD study was started in 1993 when the Harvard School of Public Health in collaboration with the World Bank and WHO assessed the GBD to generate the most comprehensive and consistent estimates of mortality and morbidity by age, sex, and region. The GBD reports from WHO in 1996, 2000, 2004 and 2008 have repeatedly found that unipolar depressive disorder is the leading neuropsychiatric element of the GBD. Unipolar depression is expected to be ranked second, and the ranking of the traditional health-concerned conditions associated with a woman's perinatal period is projected to drop from 3rd in 1990 to 11th in 2020 (2). These issues affect women more directly than men, and women in both developed and developing countries consequently experience more depression than men. According to WHO, unipolar depression still makes a large contribution to the GBD. It is the third largest contributor worldwide and eighth in low-income countries; however, it is the largest contributor in middle- and high-income countries (3). This research, therefore, focuses the mental health of women after childbirth which is a period is believed to contribute to increased depression.

1.1.2 Mental health in Thailand

In Thailand, the mental health problem has been increasing as evidenced by the "the prevalence survey of mental disorders and suicide situation" carried out by the Ministry of Public Health. The survey shows that the situation is worsening as the rate

of outpatients and inpatients visiting hospitals for psychosis, mental and behavior disorders are rapidly increasing. Table 1 depicts the rising numbers of people with psychosis, *major depression* and epilepsy. Specifically for depression, the rate was 186 per 100,000 population in 2006. This rate has steadily and rapidly increased annually from 55.9 per 100,000 just a decade ago (4).

Table 1: Prevalence of mental disorder 1997-2006

	Prevalence per 100,000 population									
Mental disorder	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
- Psychosis	440.1	435.3	424.8	451.0	519.6	828.0	751.4	682.7	572.3	640.6
- Anxiety disorder	789.9	822.6	764.7	812.2	776.0	862.5	865.6	667.6	596.8	548.8
- Major depression	55.9	74.3	99.5	130.3	94.9	134.8	163.8	140.6	149.9	186.0
- Mental retardation	44.7	52.9	58.2	52.4	51.7	62.3	56.6	55.5	51.7	60.8
- Epilepsy	109.3	125.8	NA	149.8	182.5	200.3	193.5	180.5	195.2	172.1

Source: Department of Mental Health, Ministry of Public Health.

The rapidly increasing rate of major depression in the Thai population has alarmed many WHO offices including the Office of Thailand, Regional for South-East Asia (SEARO), Department of Mental Health and Substance Abuse. Using of the World Health Organization-Assessment Instrument for Mental Health System (WHO-AIMS), the Ministry of Public Health of Thailand, in co-operation with WHO produced a report in 2007 about the mental health system in Thailand. Global attention to the depression affecting Thais demonstrates the need to address this issue seriously (5).

1.1.3 The impact of maternal depression on children aged under one year old.

Depression is increasingly recognized as a major global public health issue. Depression adversely affects individuals in all aspects of life, including work and family, and can lead to suicide (6). Depression also has a negative impact on children of all ages, although infants and toddlers are believed to be the most affected. The effect is particularly high during a child's first year since he/she requires the most care

at a time when the mother is herself particularly susceptible to depression. Table 2 illustrates how particular types of depression contribute to the medical problems affecting mothers and these children.

Table 2 Type, prevalence and the consequences of maternal depression in prenatal to postnatal children

Type and Prevalence	Consequences of Maternal Depression
Prenatal depression Prevalence: 10-20% of pregnant woman Time Frame – during pregnancy	Inadequate prenatal care, poor nutrition, higher preterm birth, low birth weight, pre-eclampsia and spontaneous abortion
"Baby Blue" or Postpartum Blue Prevalence as high as 80% of new mother Time Frame- symptom typically last from a few hours to several days and usually resolve by two week post delivery **Postpartum Depression(PPD)** Prevalence 10-20% of new mother Time Frame- If symptoms lasts more than 14 days it is PPD	***Behavioral***-Anger and protective style of coping, passivity, withdrawal, self-regulatory, behavior, and deregulated attention and arousal ***Cognitive***-Lower cognitive performance *Anxiety*- may manifest as bizarre thought and fear, such as obsessional harm to the infant. -***Poor bounding*** with baby-no attachment - ***lack of interest in baby*** lead to injury (accident)
Postpartum psychosis Prevalence: 1-2 per 1,000 new mothers	Psychiatric emergency: psychiatric hospitalization necessary, Auditory and Visual hallucinations and delusions, Insomnia, Feeling agitated and angry, Anxiety, Paranoia, Delirium, Confusion, Mania Suicidal or homicidal thoughts, Bizarre delusions and commands to harm the infant (not just obsessional thoughts)

Source: A joint publication of the New York Sate Department of Health and Office of Mental Health (7)

Table 2 very clearly shows the impact of depressed mothers on their children. Yet depressed mothers affect not only their children but also their entire families (especially their husbands), their friends, and everyone around them. Depressed mothers can be very difficult and draining to deal with, and relationships can become strained to the point where others actively avoid having anything to do with them. This generates a snow-ball effect and further contributes to a worsening self-image in turn making the person feel even more isolated and intensifying the depression. Depressed mothers need support from their husbands and families to survive and conquer this affliction.

Not all causes of postpartum depression (PPD) are known. Research has shown that high levels of prenatal depression are associated with high levels of postnatal depression, and that low levels of prenatal depression are associated with low levels of postnatal depression. However, this does not necessarily mean that prenatal depression causes postnatal depression: they might both be caused by other factors. In contrast, some factors, such as lack of social support, almost certainly cause PPD. The causal role of lack of social support in PPD is suggested by several studies, including O'Hara 1985, Field et al. 1985, and Gotlib et al. 1991) (8-10).

Numerous Western studies have also shown that social support, particularly spousal support, is the most important factor causing or preventing depression. In Thailand, however, social support has only been explored in respondent of mothers with ill or disabled children. Previous research has shown that several factors such as income, years of education, parity, and maternal self-efficacy influence parenting behaviors. Two variables alone, maternal self-efficacy and number of years of education years, explain 34.27% of the variances in parenting behavior (11). However, this conclusion reflects the results for mothers with children between aged 1 and 3 years old, and may not apply to mothers with children aged under one year old.

This current study, therefore, aims to investigate the relationships between individual and social factors and depression in Thai mothers with children aged under one year old.

1.2 Research question

What are the factors related to maternal depression in Thai adult mothers with children aged under one year old?

1.3 Research objectives

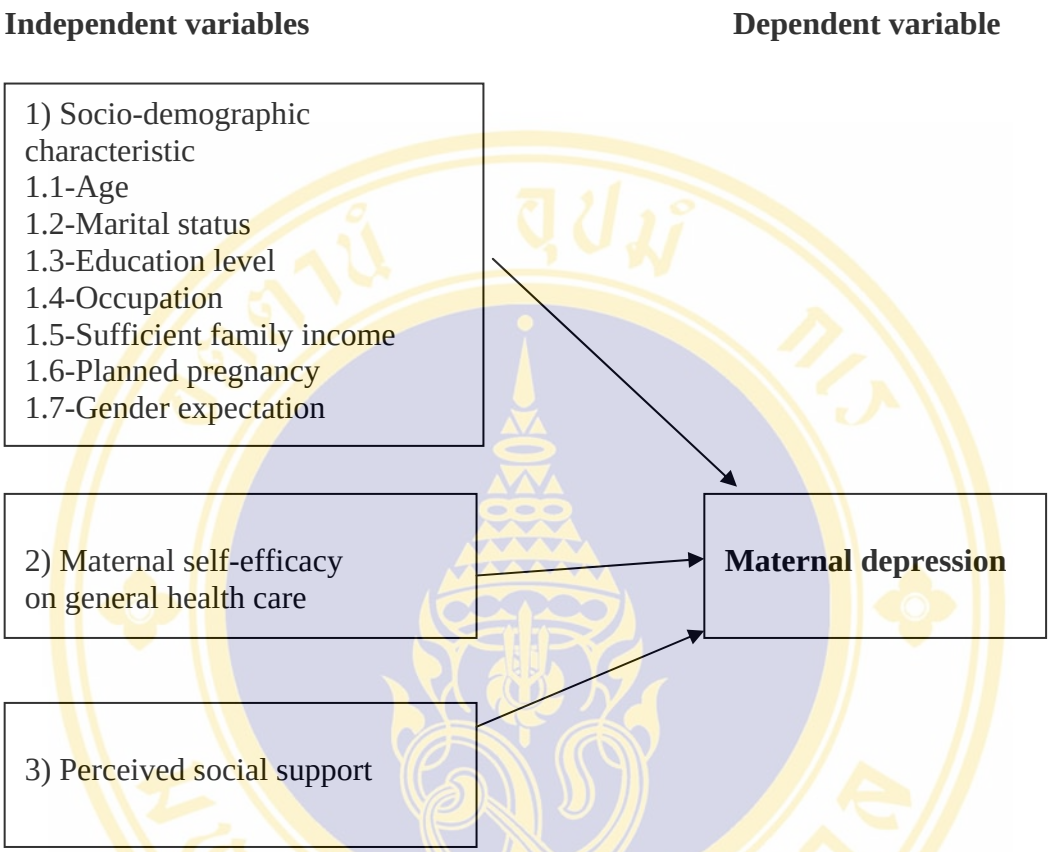
1.3.1 General objective

To assess the relationship of maternal socio-demographic characteristics (age, marital status, education level, family income, number of children, planned pregnancy, and gender expectation), maternal self-efficacy, social support to maternal depression in Thai adult mothers with children aged under one year old.

1.3.2 Specific objectives

1. To describe the characteristics of mother among Thai adult mothers with children aged under one year old.
2. To determine the extent of maternal depression in Thai adult mothers with children aged under one year old.
3. To examine the relationship between maternal socio-demographic characteristics and maternal depression in Thai adult mothers with children aged under one year old.
4. To examine the relationship between maternal self-efficacy and maternal depression in Thai adult mothers with children aged under one year old.
5. To examine the relationship between social support and maternal depression in Thai adult mothers with children aged under one year old.

1.4 Conceptual Framework



1.5 Outline the variable studies include

1. Socio-demographic: maternal age, education level, marital status, family income, occupation, number of children, unplanned pregnancy and gender disappointment

2. Maternal self-efficacy

3. Social support

4. Maternal depression

1.6 Research hypotheses

1. It is hypothesized that there is a correlation between socio-demographic characteristics and maternal depression in Thai mothers with first year well-baby.

1.1 ***Age*****:** It is hypothesized that adult mothers are correlated with low rate of maternal depression

1.2 ***Marital status*****:** It is hypothesized that single mothers are more likely to experience high rate of maternal depression

1.3 ***Education level*****:** It is hypothesized that a high education level is correlated with low rates of maternal depression

1.4 ***Occupation*****:** It is hypothesized that unemployed mothers are more likely to experience high rates of maternal depression

1.5 ***Sufficient family income*****:** It is hypothesized that low family income is correlated with high rates of maternal depression.

1.6 ***Planned pregnancy*****:** It is hypothesized that planned pregnancy is correlated with low rates of maternal depression.

1.7 ***Gender expectation****:* It is hypothesized that a baby's gender as a parental expectation is correlated with low rates of maternal depression.

2. It is hypothesized that high levels of maternal self-efficacy are correlated with low level of maternal depression in Thai mothers with healthy babies under one year of age.

3. It is hypothesized that high levels of social support are correlated with low level of maternal depression in Thai mothers with healthy babies under one year of age.

1.7 Operational definitions of studied variables

Socio-demographic factors included:

1. Age of mother is expressed as a complete year on the interviewing day of data collection.

2. Marital status is classified into 4 categories:

1) Single

2) Married

3) Divorced/separated

4) Widowed

3. Education level refers to the highest level of education that a mother has achieved measured by number of year.

4. Occupation refers to a mother's employment at the date of data collection. It is categorized as:

1) Housewife or unemployed

2) Government or State enterprise official

3) Office worker

4) Laborer or wage earner

5) Seller

5. Sufficient family income:

1) Income exceeds expenses and allows savings;

2) Income equals expenses;

3) Expenses exceed income and causes debt.

6. Planned pregnancy refers to a child where birth was planned before pregnancy.

7. Gender expectation refers to the expectation of parents about the gender of an unborn child.

"**Maternal self-efficacy in infant care" means** a mother's belief in her ability to take care of her baby. Self-efficacy is determined by how a mother feels, thinks, motivates herself and behaves. In this study, maternal self-efficacy is measured by the Self-efficacy in Infant Care Scale (SICS) which was specifically developed for Thai mothers by Prasopkittikun (12). The confidence continuum scale ranges from 0 (being not confident at all of being able to take care of her baby) to 100 (being very confident of her ability to take care of her baby).

"Social support" is defined as positive interaction or helpful behavior provided to a person in need of support (13). Perceived social support is operationally measured by the Personal Resource Questionnaire (PRQ-85)-part II (14) which was translated into Thai by Sinsukai (1998) (15). The PRQ-85 part II consists of 25 items with a 7-point rating scale ranging from 1(strongly agree) to 7 (strongly disagree), and is used to assess perceived support based on Weiss (1974) (16). The score ranges to 25-175. A higher score indicates a higher level of perceived support**.**

Maternal depression

The Health-Related Self-Report (HRSR) was used to measure maternal depression. This instrument was developed as a diagnosis screening test for depression for use in Thailand. (17). It consists of 20 questions. There are 3 specific positive questions which can clearly distinguish between depressed and not depressed patients. A score of 25 or over indicates a probable case of depression. The HRSR scale possesses a clear factorial structure, and good clinical validity and reliability. It is also suitable for use as a diagnostic screening instrument for detecting depression and other mental illnesses in Thai people.

1.8 Limitation of the study

Participants in this study comprised only Thai mothers aged 20 years or more, who had healthy infants aged 1-12 months old, and who attended the well-baby clinic in the Samudsakhon Hospital.

CHAPTER II
LITERATURE REVIEW

This research aims to determine the association between socio-demographic characteristics, maternal self-efficacy, and social support with maternal depression in adult Thai mothers. The study explores in detail the following topics:

2.1 Maternal depression
- 2.1.1 Definition of depression
- 2.1.2 Depression worldwide
- 2.1.3 Consequence of depression

2.2 Self-efficacy
- 2.2.1 Concept of self-efficacy
- 2.2.2 Maternal self-efficacy

2.3 Social support

2.4 Previous studies related to the socio-demographic characteristics of maternal depression.

2.1 Maternal depression

2.1.1 Definition of depression

Depression is a common mental disorder that presents with depressed moods, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep, diminished appetite, low energy, and poor concentration. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide, a tragic fatality associated with the loss of about 850,000 thousand lives every year worldwide (18).

2.1.2 Depression worldwide

The WHO global burden of disease (GBD) measures the burden of disease using the disability-adjusted life years (DALY). This time-based measure combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health. The DALY metric was developed in the original GBD 1990 study to assess the burden of disease consistently across diseases, risk factors and regions.

The GBD study in 2000 drew on a wide range of data sources to develop internally consistent estimates of incidence, health state prevalence, severity, duration and mortality. The study covered over 130 major causes of mental health problem, in 17 sub-regions of the world and revealed that depression was the leading cause of disability as measured in term of Years Lives with Disability (YLDs), and the fourth leading contributor to the GBD in term of Disability Adjusted Life Years (DALYs) in 2000. By the year 2020, depression is projected to become the second largest cause of DALYs for all age groups and both genders (2).

According to the WHO GBD 2004 update, part 4 page 40-49 (as published on October 2008), depression is still the leading cause of disease burden for women in both high-income and low- and middle income groups. Maternal conditions are a major contributor to the high burden of disease for women in Africa relative to other regions. The burden of maternal conditions in the African and South-East Asia regions is responsible for 8% of the total GBD for women aged 15–59 years. Mental disorders are an important source of lost years of healthy life for women aged 15–44 years. They comprise 3 of the 10 leading causes of disease burden in low- and middle-income countries, and 4 of the leading 10 in high-income countries; self-inflicted injuries are also in the leading 10 causes for low- and middle-income countries Depression is the leading cause of disease burden for women in both high-income and low- and middle-income countries for women aged 15–44 years (Figure 1) (3).

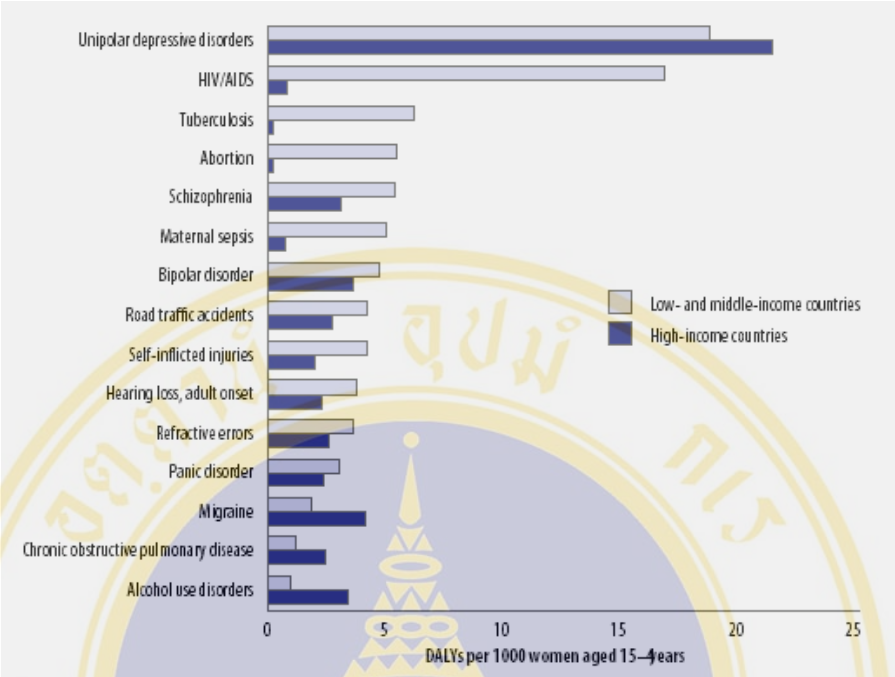


Figure 1 Leading causes of disease burden for women aged 15-44 years, high-income, and low-and-middle-income countries, 2004

Facts about depression (18)

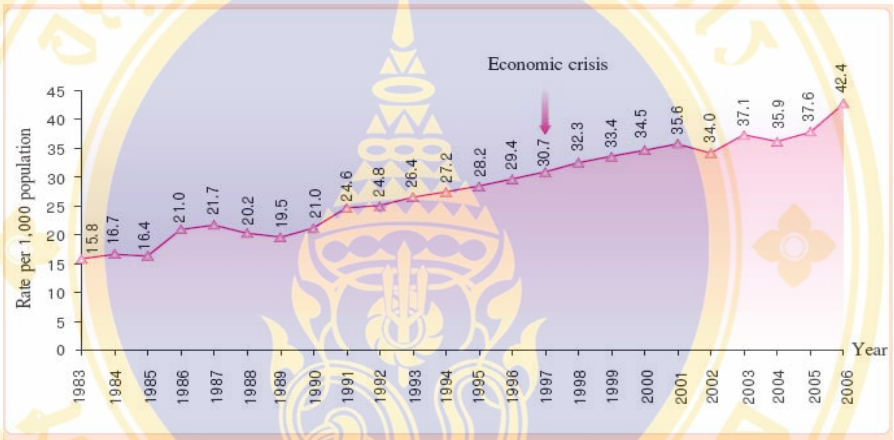
- Depression is common, affecting about 121 million people worldwide.
- Depression is one of the leading causes of disability worldwide.
- Depression can be reliably diagnosed and treated by primary care.
- Fewer than 25 % of those suffering depression have access to effective treatments.

2.1.3 Depression in Thailand

Depression is widespread in community and clinical settings in Thailand. Due to its potentially severe consequences and morbidity depression is becoming a major concern of health administration officials. In 1999, depression ranked fourth in women and fifteenth in men, in term of DALYs. If consider about mental health-related with disability, depression was the first leading cause of it for women and the second and third leading causes for men.

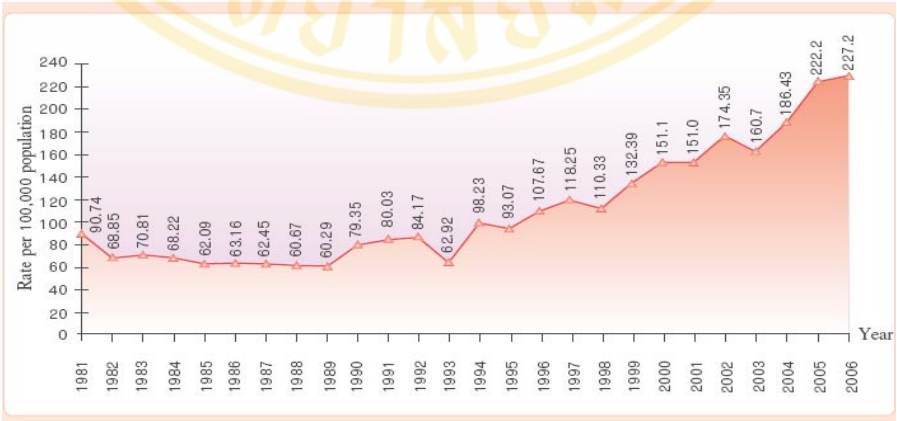
The Thai Mental Health Survey in 2002, using the Mini International Neuropsychiatric Interview (M.I.N.I.), showed that the prevalence of major depressive episodes and dysthymia in the general population aged 15-59 years old were 3.2% and 1.2%, respectively. The data relevant to this problem was obtained from primary care sources, psychiatric hospitals, and an addiction center (19).

Figures 2 and 3 show that numbers of both out-patients and in-patients seeking treatments have rapidly increased during the last two decades, and demonstrate how the situation is worsening. (4).



Source: Outpatients Report. Bureau of Policy and Strategy, Office of the Permanent Secretary, Ministry of Public Health.

Figure 2 Out- patient visits for mental and behavioral disorders, 1983-2006



Source: Inpatients Report. Bureau of Policy and Strategy, Office of the Permanent Secretary, Ministry of Public Health.

Figure 3 Rate of admission of patients with psychoses and mental disorders, 1981-2006

The high rate of depression in Thai people has been increasing rapidly, especially in mothers after childbirth. Depressed mothers have the greatest affect on young children especially infants. Therefore, the objective of this research was to ascertain the factors relating to maternal depression and identify those factors leading to low level of maternal depression in Thai mothers.

2.1.4 The consequences of depression

Depression is an important determinant of poor health outcomes for mothers and their babies. Some depressed mothers, however, may not express their depressed feelings but try to display emotional stability. Hidden maternal depression can have serious and lasting consequence on child development. Depression not only affects the psychosocial well-being of a mother, but postpartum depression also a mother's and has particular negative outcomes for her infant, and the mother–infant relationships. Table 3 illustrated how, depression in mothers can affect their children even during pregnancy, and continue until adolescence.

Table 3 Consequences of maternal depression for children of all ages (20)

	Behavioral Problems	**Cognitive Problems** (difficulty in acquiring language, thinking and memory skills)	**Physical Complications**
Prenatal			• Pre-term delivery • Miscarriage
Infant	• Passivity • Anger • Withdrawal • Attention and arousal problems		• Low-birth weight • Low-weight gain
Toddler	• Passive noncompliance • Less independence • Less interaction with others	• Less creative play • Lower performance on verbal and memory tests	
School age	• Impaired adaptive functioning • Depressive disorders • Anxiety disorders • Attention disorders /ADHD	• Lower IQ scores	

	Behavioral Problems	**Cognitive Problems** (difficulty in acquiring language, thinking and memory skills)	**Physical Complications**
Adoles-cent	• Depressive disorders • Anxiety disorders including phobias and panic disorder • Substance abuse • Conduct disorders • Attention disorders /ADHD • Increased risk of psychiatric hospitalizations	• Learning difficulties	

Table 3 shows the effect of maternal depression on, children's behavior. Depressed mothers are often unable to provide consistent care for their babies; and postpartum depression can have permanent effects on child development and well-being. If a mother's ability to interact with her child is compromised, her infant may fail to develop important skills. Infants of depressed mothers commonly suffer developmental delays, especially the ability to respond to positive emotion and interact with others. The table clearly demonstrates that maternal depression has a major effect on infants since its main symptom is a lack of emotionality and the need for maximum care.

It is very important to treat maternal depression. When a depressed mother remains untreated, the whole family is affected, and the quicker the mother gets treatment, the better the prognosis for the entire family. Maternal depression can be separated into four types of depression: 1) prenatal depression, 2) baby blue, 3) postpartum depression, 4) postpartum psychosis (See Table 4) which can occur from pregnancy and continue after child birth. And the most serious risk factor for maternal depression is a previous episode of perinatal or postpartum depression. Approximately 50%–62% (21) of women with a history of postpartum depression and 33% of women with a history of perinatal depression will experience depression during or after their next pregnancy (22).

Table 4 Symptoms of each type of depression since pregnancy to after childbirth

Type and Prevalence	**Symptoms**	
Prenatal Depression Prevalence:10-20% of pregnant women	- Crying or weepiness - Sleeping problem (not due to frequent urination) - Fatigue - Appetite disturbance	- Loss of enjoyment and activities - Anxieties - Poor fetal attachment and irritability
"Baby Blue" or Postpartum Blue Prevalence as high as 80% of new mother	• Feeling overwhelmed • Irritability • Frustration • Anxiety • Mood lability (ups and downs – mom is elated one minute, and crying the next) • Feeling weepy and crying	• Exhaustion • Trouble falling or staying asleep • Time Frame – symptoms usually resolve by two weeks post delivery
Postpartum Depression (PPD) Prevalence: 10 - 20% of new mothers	• Frequent episodes of crying or weepiness and persistent sadness and flat affect • Fatigue , appetite disturbances • Feelings of inadequacy or guilt • Sleep disturbances (not due to baby's night awakenings) • Irritability and mood instability • Overly intense worries about the baby and difficulty concentrating or making decisions • Lack of interest in the baby, family or activities	• Anxiety may manifest as bizarre thoughts and fears; may harm to the infant • Poor bonding with baby: no attachment • Thoughts of death or suicide and may present with somatic symptoms, e.g., headaches, chest pains, heart palpitations, numb-ness and hyperventilation. •Time Frame – If symptoms lasts more that 14 days it is postpartum depression

Table 4 Symptom of each type of depression since pregnancy to after childbirth (cont.)

Type and Prevalence	**Symptoms**	
Postpartum Psychosis Prevalence: 1-2 per 1,000 new mothers	• Psychiatric emergency: psychiatric hospitalization necessary • Auditory hallucinations and delusion(often about the baby, and often of a religion nature) • Visual hallucinations(often in the form of seeing or feeling a presence or darkness) • Insomnia, feeling agitated and angry • Anxiety and paranoia	• Delirium (waxing and waning symptomatology: appears normal one moment and is floridly psychotic the next) • Confusion and bizarre delusions and commands to harm the infant (not just an obsessional thought) • Mania • Suicidal or homicidal thought

Source: A joint publication of the New York Sate Department of Health and Office of Mental Health (7)

Previous research has shown that about half of all mothers experience some mild form of depression, called postpartum blues, caused by a rapidly increase of hormones after childbirth. Maternal depression is directly and negatively related to behavior and cognitive skills in children (23). Maternal depression causes mothers to be less attentive to their children's needs and be less able to care for or protect their children. Lack of maternal attention can endanger young children and expose them to accidents (24). Western research indicates that low self-efficacy and lack of social support are major factors contributing to maternal depression, especially during the postpartum period. This study aims to explore depression in adult mothers with healthy infants under the age of one year.

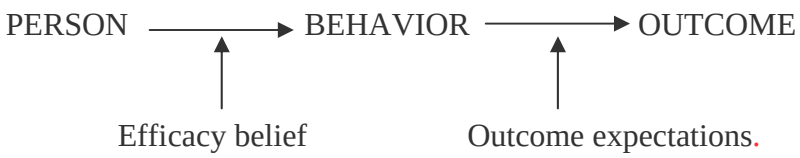
2.2 Self-efficacy

2.2.1 Concept of self-efficacy

Bandura introduced the concept of self-efficacy beliefs 1977 (25). Self-efficacy refers to an individual's beliefs about his/her successful performance in a particular behavior. There are four main sources influencing self-efficacy: cognitive, motivational, affective, and selection. The strongest sense of efficacy is through mastery experiences from the past (26). Self-efficacy beliefs determine how one thinks, feels, motivated, and behaves.

Bandura(1986) explained that perceived self-efficacy affects causal thinking in which people who have a sense of efficacy attempt to find alternative ways to achieve their goals. They tend to attribute their failure to insufficient effort, rather than to deficient ability. People who perceive themselves as inefficacious are likely to turn away from difficult tasks and give up easily. Such perception removes from task demands, decreases aspiration, and induces anxiety and stress. Therefore, an optimistic sense of personal efficacy is an important determinant of an individual's sense of achievement and well-being (27). Self-efficacy influences through patterns and emotional reaction that, in turn, affect people's action through cognitive, motivational, affective, and selective processes (28). Bandura (1995) describes perceived self-efficacy as bringing about depression both directly and indirectly in many ways. For example, inefficacious persons cannot fulfill their aspirations. They have decreased development of social support from which to gain satisfaction and buffering from the effect of chronic stress. They have less ability to control disturbing thoughts that contribute to the occurrence, duration, and recurrence of depression (29).

Bandura (1997) outlined the essence of self-efficacy as a central role for individuals' behaviors and responding outcomes (30).



Over the past decades, numerous research projects have revealed the relationship between self-efficacy beliefs and behavior performance. Examples are how self-efficacy is related to academic achievement (31), athletic performance (26), treatments for bulimia nervosa (32), decision making in a complex event (33), and treatments for fear reduction (26).

In the above examples, individuals with high degree of perceived efficacy confidently believe in their own abilities, and tend to have high quality in performance when confronting difficult situations or tasks (34). In contrast, low self-efficacy individuals tend to possess self-doubts and anxieties which more likely lead to failures than successes. Apparently, success is strongly associated to one's self-beliefs. It is believed that self-efficacy is influenced by parenting practices.

2.2.2 Maternal self-efficacy

Maternal self-efficacy refers to a mother's expectation about of how well she can perform as a mother (31). Expanding on Bandura's views, high maternal self-efficacy has been associated with specific adaptive parental outcomes. These include: responsive, stimulating, and non-punitive caretaking (35); active maternal coping orientations (36); a relative absence of maternally perceived behavioral problems (37); and maternal ability to foster a healthy, happy and nurturing childrearing environment (38).

Mothers who have low self-efficacy are found to have higher level of maternal depression (24, 39); actual behavior problems in children and maternal perceptions of child difficulty (37); a passive coping style in their parental role (36); and to have a tendency to focus on relationship difficulties, negative effects, elevated autonomic arousal, feelings of helplessness in the parenting role, and use coercive discipline (38).

However, while this topic has been studied in other countries, there has been relatively little comparable research in Thailand. It is still unclear, therefore,

whether low level of self-efficacy in Thai mothers can be linked to high level of depression.

2.3 Social support

Social support is conceptually defined as the perception of being provided when one needed, as relational provisions that require supportive relationship. Supportive relationships involve six dimensions of social support, namely (a) a sense of security and place; (b) social integration; (c) provision of assistance in times of need and a sense of being needed; (d) a sense of feeling valued as an individual and in a social role; (e) reliance on help from others regardless of reciprocity of support; (f) emotional support and information for re-evaluating particular situations (16).

Studies have consistently shown a negative correlation between postpartum depression and emotional and instrument support i.e. practical help in terms of material aid or assistance with tasks during pregnancy (40). Lack of social support during pregnancy has been shown to be a strong risk factor for depressive symptoms postpartum (41). The fact, depressed mothers tend to view everything more negatively, including the level of support that receives. Low levels of social support are one of the strongest predictor of postpartum depression (42). These findings suggest that marital problems in women during pregnancy are reflected in feelings of isolation and lack of support.

Social support has been negatively correlated with postpartum depression. Mothers with significant level of social support have been found to show more sensitivity, responsiveness, and to be engaged in more maternal behavior than mothers with less support. Mothers who receive social support display better moods, better perceptions, and less anger towards their children. Increased knowledge and providing reassurance can also improve health and well-being; reduce stress; and decrease depression (43, 44). Good social support relate to low maternal depression because supporters provide knowledge and reassurance to the recipients.

Spouse support is considered to be the most important cure for maternal depression (15). Support from a child' father is mentioned frequently as being important to pregnant women. Social support can also be provided by relatives, friends, or associates. Support from friends and relatives during the stressful times are thought to be a protective factor against the development of depression (39). Social support is a multidimensional concept consisting of 1) information support (where advice and guidance is given); 2) instrument support (i.e. practical help in terms of material aid or assistance with tasks); and 3) emotional support (expression of caring and esteem) (42). Fathers, however, may have limited economic resources, and thus be less able to provide financial support. They also may lack maturity to provide their partners with the emotional support and stability mothers need. Now seems, therefore, to have been well established by exciting research that lack of social support is a significant great risk factor for maternal depression.

2.4 Previous research relating to the independent variables

2.4.1 Maternal age

Maternal age is an important factor that leads to either antepartum or postpartum depression. Current and past research from the western countries and from Thailand has found that there is a significantly high level of maternal depression among adolescent mothers (37, 38). This research excluded the adolescence factor and focused instead on selecting mothers who were at least 20 years old. Although depression may be more common in adolescent mothers than in adult mothers, adult mothers express more emotional responsiveness to their children (45).

2.4.2 Marital status

Childbearing is a more challenging task for single mothers because as spousal support is considered an important remedial factor for maternal depression (15). Established in 2001, a British birth cohort examined whether the close relationship of parents was related to smoking during pregnancy, breastfeeding and maternal depression. It was found that there was a significant difference in level of maternal depression between married and unmarried mothers. Approximately thirty-

one percent of unhappily-married women reported depression compared to just 13% of happily-married women (46). Unmarried women, however, experience more stress due to less economic resources/support. Mothers who are both poor and single are also even more prone to depression.

2.4.3 Education level

Maternal depression has been significantly correlated with maternal education levels (46). A study of 1,217 non-familial caregivers found depressed caregivers were inactive and withdrawn; they also displayed less attention and fewer interactions with their children. This is particularly apparent with less-educated caregivers in family child-care settings (6). Maternal depression symptoms tend to be more common when the maternal education levels are low (47, 48).

2.4.4 Occupation

Unemployment, particularly due to job loss, is associated with increasing and higher rates of depression (27, 34, 36). However, working hours and work history have not been found to be related to symptoms of maternal depression (33).

2.4.5 Sufficient family income

Low-income mothers of young children, in combination with other risk factors, experienced high level of depression in the 40 to 60 percent range (5). Evidence shows that those on welfare suffer greater depression than other low-income women (e.g., Lennon, Blome, and English 2001). Economic pressure is related to a parent's depressed mood and to marital conflicts, both of which may subconsciously decrease the quality of parenting practice and ability (48- 50)

2.4.6 Planned Pregnancy

When a pregnancy is unplanned and unintended, the consequences can affect a couple's relationship and their finances. There are a number of issues concerning unplanned pregnancies, especially among young adults. In the United States, there is alarmingly high number of teen pregnancies leading to more researches

about how unplanned pregnancies can affect the overall mental health of both mothers and their children.

According to Bowen in the Antenatal Depression study (2006), unplanned pregnancy is linked to concerns such as late entry into prenatal care, infant mortality, and low birth weight (52). The study further describes how children born from unplanned (and especially unwanted) pregnancies are also at greater risk of child abuse and negligence, poor motherly attachment, cognitive and physical deficits.

Unplanned pregnancies can also give rise economic consequences. For people facing financial constraints, family planning is even more important. In addition, the lack of contraceptive usage by teenagers often causes unplanned pregnancies and later leads to school interruptions which, in turn, pave the way to poverty.

Unplanned pregnancies can cause stress and emotional turmoil. Women who intentionally use pregnancy to secure a marriage may find themselves stuck with a unwanted pregnancy instead of a wedding ring. Therefore, a new mindset for sexual cultures and attitudes among young adults needs to be encouraged.

A longitudinal study has shown that the impact of an unwanted pregnancy on the mental health of a mother is significant. Mothers of unwanted children have exhibited somewhat higher rates of anxiety and depression than mothers in a comparison group (53).

Many babies are the result of unplanned pregnancies. However, there is a difference between an unplanned pregnancy and an unwanted baby. There are solutions for both, but if legislation does not make them accessible, the grim result may be that babies are abandoned or left to die. From the experiences more than 10 years as a nurse; the investigator has seen lots of unplanned pregnancies have happy endings. In this point is extremely important to remember: “There is a difference between unplanned and unwanted.”

The literature has established that unplanned pregnancies may link to maternal depression and may have different outcomes in different cultures. Due to limited study about unplanned and unwanted babies in Thailand, it is appropriate research objective to distinguish between “unplanned” and “unwanted” and to ascertain whether this distinction affects maternal depression in Thai women.

2.4.8 Gender Expectation

Hormone-induced post-partum depression is now a widely recognized phenomenon. However, there are still aspects which remain less than fully explained or understood but yet involve many new mothers. Gender disappointment/expectation (i.e. the reality of being deeply disappointed or devastated at not carrying and giving birth to a child of a particular gender) is a reality which is rarely discussed. It is commonly believed that most men want to have boys, and most women pray for girls. Although this may be too simplistic, most parents at sometime express a preference for either a boy or girl, if only to “complete” their family when they already have multiple children of a particular gender, or to have “one of each”.

Gender expectation/disappointment has many facets. Prospective parents are culturally-biased in favor of boys and the mass killings and abandonment of baby girls in countries like China and India is turning to mass abortions of female fetuses. Those who can afford genetic screenings can proceed directly to abortion instead of waiting for an ultrasound that may be offered too late into the pregnancy. This had led to dramatic shifts in population demographics.

Since a baby’s gender is very important to family/ cultural traditions and expectation, gender expectation has been included as a relevant variable. Although Thai culture does no attribute the same importance to a baby’s gender as Chinese or India culture, this factor is nevertheless important and relevant, particularly to nurse. Many nurses in Thailand have had the unforgettably tragic experience of encountering mothers who have not wanted particular babies, and have witnesses such mothers refuse their babies from the hospital nursery.

CHAPTER III
RESEARCH METHODOLOGY

3.1 Study design

The focus of this cross-sectional research was to assess the relationship of maternal self-efficacy and social support to maternal depression in Thai adult mothers with healthy babies under one year of age. This study also aimed to describe the relationship of socio-demographic factors (i.e. maternal age, marital status, education level, sufficient family income, maternal occupation, planned pregnancy, and baby's gender expectation) to maternal depression.

3.2 Study population

- Adult mothers aged 20 years, or older
- Thai nationality and Thai-language literate
- Mothers with healthy babies (aged 1-12 months old) being full-term infants from a single birth and without particular illness or disability.

3.2.1 Inclusion criteria

- Adult mother aged 20 years or above
- Thai nationality and Thai language literate
- Mother with a child under one year of age

3.2.2 Exclusion criteria

- Mothers who did not take care of their children by themselves (i.e. with children raised by grandparents, relatives or babysitters).

- Mothers with children suffering from chronic illness, including major thalassemia, chronic heart disease, leukemia and autistic disorders.
- Mothers with handicapped children. .

3.3 Sample size and sampling technique

Sample size was calculated, using the formula

Proportion $n = \frac{Z^2 P (1-P)}{E^2}$

$n = (1.96*1.96)*0.5(1-0.5)/ (0.06*0.06)$

$n = 266$

n = estimated sample size

Z= Level of statistic significant for two-side test = 1.96 (alpha= 0.05)

p = Using average proportion = 0.05 (due to unavailability of proportion from previous studies)

E= allowance for relative error = 0.06

Total sample = 266 + (266 x 5%=13) =279

(5% is added to sample because some participants may withdraw)

Sampling technique: A simple random sampling technique was used to recruit study participants. Since the participants were relatively homogenous and the author has received the list of baby's appointment for vaccination from the OPD nurse at Samutsakhon Hospital. Then, mothers would be selected from the list following the inclusion criteria which described above. Since the period of data collection was short, the approach could be conducted without replacement. Which the process was going well; the mothers were approached 295 following the inclusion criteria. However, the questionnaires with missing data were excluded from the sample, resulting in study sample of 285 were analyzed.

3.4 Research instrument for data collection

A self-report questionnaire was used for collecting data. The questionnaire consisted of four parts: socio-demographic characteristics of the mother, maternal self-efficacy in infant care (in general part), social support, and maternal depression

1. Maternal self-efficacy data was assessed using the Self-Efficacy in Infant Care Scale (SICS). The SICS was developed by Prasopkittikun, Tilokskulchai, Sinsuksai, and Sitthimongkol (2006). Their questionnaire asked question about the degree of maternal confidence in infant care. It comprised of 40 items concerning:

1. Development promotion (14 items)
2. General Health Care (13 items)
3. Safety (5 items)
4. Diet (8 items)

However, this study only used the General Health Care part. By making a cross (x) against the appropriate percentage number for each question, the respondents indicated their degree of confidence on a scale ranging from scale of 0 to 100 with 100 indicating highest confidence.

The final score was calculated by adding all scores from the 13 items (i.e. the number of questions) and dividing by that number. A high score indicated high maternalself-efficacy.

Validity was tested through exploratory factor analysis and confirmatory factor analysis (12).

Reliability using Cronbach's alpha (12) coefficients of 40 items ranged from .83 to .93 with .95 for the entire scale. Specifically, the reliability of the General health care part was .89. For this research, the 13 items of general health care part were tested for reliability and the result showed that reliability using Cronbach's Alpha =.86

Previous Western studies used questionnaires that might not be appropriate for the Thai population and culture. By using the "SICS" questionnaire developed for use in Thailand, this particular study generated the most meaningful research data and findings for the Thai population.

2. For the social support data, the Personal Resource Questionnaire (PRQ-85) Part II was used. This questionnaire was developed by Weinert and Brandt (1987) and consisted of 25 items covering perceived social support. The respondents selected desired scores ranging from 1-7. The definitions for each score were as follows:

Response Anchor	**Scoring**	
	Positive item	**Negative item**
Strongly disagree	1	7
Disagree	2	6
Quite disagree	3	5
Neutral	4	4
Quite agree	5	3
Agree	6	2
Strongly agree	7	1

Items 4, 7, 10, 16, and 24 were negative, and the remaining items were positive. After reversing negative items, the total score was the summation of all scores from all 25 items. A high score means high social support.

The validity testing of PRQ-85 was reported the alpha coefficient of .93 for its internal consistency, and a correlation of .72 ($p<.001$) which for tested and retested taken 4-6 weeks apart. The original English-version of the PRO-85 Part II question was translated into the Thai language by Sinsuksai (1998) who used it in her study of mothers of full-term infants. In Sinsuksai's study, the alpha coefficient was .89. This questionnaire was also used for mothers with preterm infants in Prasopkittikun's study (2001) in which the reliability rate was .81. This questionnaire was most recently used in Vipuro's study (2007) (54). The PRQ-85 Part II was tested for reliability and the result showed that reliability using Cronbach's alpha = 0.83

3. For the depression factor, The Health-Related Self-Report (HRSR) was used to assess depression. The HRSR was developed by Thai professionals specifically for Thai respondents. The questionnaire contains 20 questions inquiring about general feelings, including severe depression that can lead to suicide. Respondents answer each question by making a cross (x) against their preferred answers. There are three questions in this questionnaire indicating positive thinking. Participants who answering these three questions would show that they have no depression at all (17).

Example question:

1. Poor appetite/anorexia

☐ Frequent ☐ Rather Frequent ☐ Sometimes ☐ Never

Frequent = almost everyday ----------score = 3
Rather Frequent = 2-3 days/week----------score = 2
Sometimes = less than 1 time/week----------score = 1
Never----------score = 0

Reliability of HRSR, Cronbach's alpha coefficient = .91
Sensitivity = 90.2%, Specificity = 85.3% (Total score 60 / Cutoff point = 30)
Sensitivity = 75.1%, Specificity = 93.4% (Total score 60 / Cutoff point = 25)

For major depression, the cut off point is at 25 contributing to a high 93.4% specificity but reducing the sensitivity to 75.1%. The cut off point in this study was 25. The HRSR questionnaire is able to screen for people who are depressed, or at risk of depression or other mental health problems, confidentially. In this study the HRSR was tested for reliability in 285 cases and the result showed that reliability using Cronbach's alpha =0.79.

3.5 Data collection process

First, the documents were submitted to the Ethic Committee at both Mahidol University and Samutsakhon Hospital

Second, after receiving permission from Ethics Committees of Samutsakhon Hospital (ที่ สค 0027.2/ พิเศษ) and Mahidol University (ที่ ศธ 0517.016 (1)/790), data collection followed the following steps:

1. Research assistants were trained to understand the questionnaire and process.

2. Eligible mothers were invited either by the author or research assistants to participate in the study while waiting for their clinic appointments.

3. The purposes and processes of the study and the protection of participants' human rights were explained to all willing participants.

4. A written information sheet was given to each participant.

5. A self-report questionnaire was given to each participant and completed at the hospital. About 15 minutes were usually taken to complete the questionnaire.

6. Copies of both the English and Thai versions of the questionnaire are attached.

7. The participants were assured that all information would be confidential, that their identities would not be revealed, and that answers would not be linked to particular participants.

8. The participants were advised that they had the right to withdraw from this study at anytime, and that such a decision would not affect to all the treatment or the care given to their infants.

9. Upon the completion of the questionnaire, as an expression of appreciation, participants were given either a baby book (to encouraging the mother to read to the baby) or a baby shirt.

3.6 Data analysis

Data was coded, and edited using Minitab software. Descriptive statistics were used to explain the raw data provided by the respondents and distribution of both dependent and independent variables. Inferential statistics for the 2 variables were used to identify the relationship between independent and dependent variables. Significant levels were set at p-value $\leq$ 0.05 and 95% confidence interval. Bivariate and Multivariate analyses were used to analysis the data. Bivariate analysis using Pearson's Product Moment Correlation tests for determination between any 2 continuous variables. Chi-square tests were used to examine the relationships between any 2 categorical variables. And multiple regression analyses using stepwise used to find out the predictor of depression.

CHAPTER IV
RESULTS

This chapter presents the results of the data analysis. The data were collected by self-report questionnaire from 285 mothers with healthy babies under one year old, who attended the well child clinic at pediatrics' out patient department at Samutsakhon Provincial Hospital to have their baby vaccinated. For data analysis, non-parametric tests were used for categorical data. For continuous data: maternal self-efficacy, social support and maternal depression were checked for normal distribution. The results indicated a normal distribution making the use of parametric tests appropriate. A significance level of .05 was used for all statistical analyses.

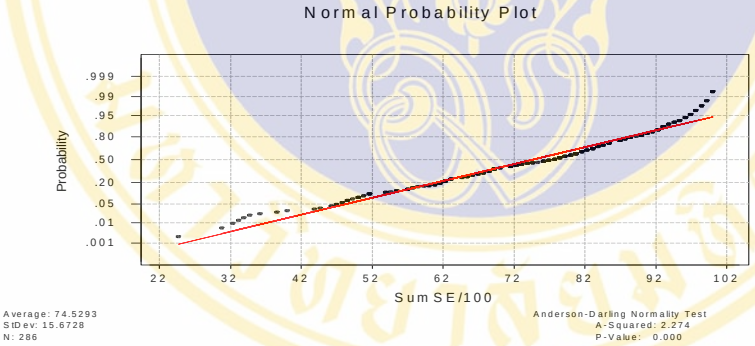


Figure 4 The distribution of maternal self-efficacy

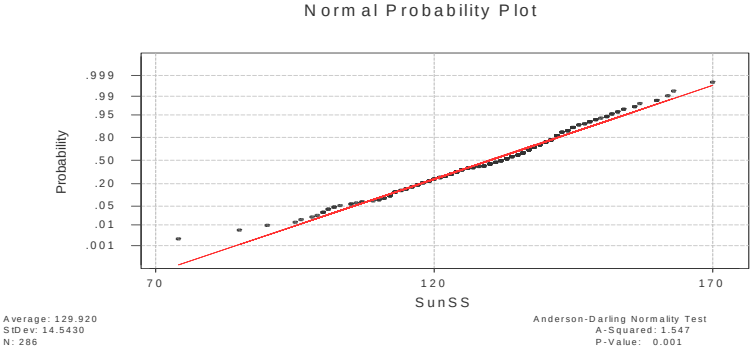


Figure 5 The distribution of social support

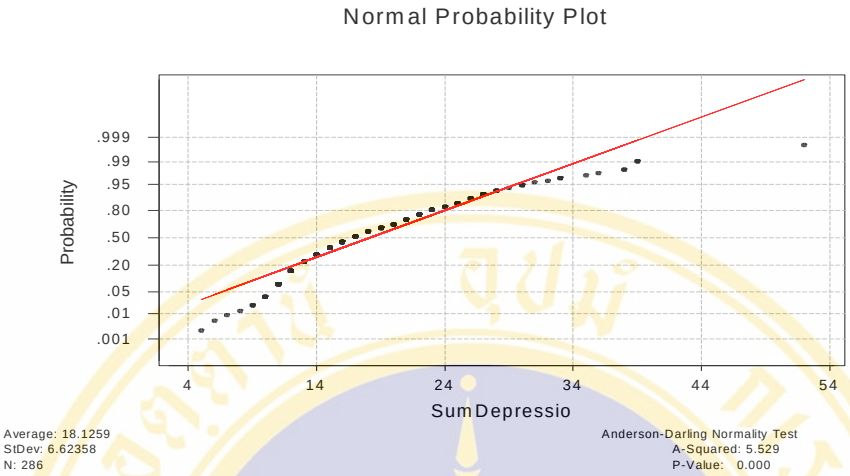


Figure 6 The distribution of maternal depression

The relationship between maternal depression and socio-demographic characteristics of the mothers, maternal self-efficacy in infant general care, and social support were explored. The results are presented in the following 2 parts:

Part I Descriptive analyses indicate the percentage and frequencies of each independent and dependent variables as follows:

1 Socio-demographic characteristics of respondents

2 Maternal self-efficacy, social support, and maternal depression

Part II Correlation analyses presents the associations of each independent variable with the dependent variables. The associations are as following:

1 Bivariate analyses between socio demographic characteristics, self-efficacy, social support, and depression

2 Multivariate analysis between independent variables and the dependent variable.

Part I

4.1 Descriptive analyses indicate the percentage and frequencies of each independent and dependent variables

4.1.1 Socio-demographic characteristics

Socio-demographic characteristics particularly age, marital status, education, occupation, sufficient of family income, unplanned pregnancy, and gender disappointment are described as follows:

The respondents ranged in age from 20 to 46 years old with an average age of 27.8 years old (SD= 5.680). Most (62.59 %) are in the middle reproductive age from 20 to 29 years old 33.22% were 30 to 39 years old and the remainder (4.20%) were at the range from 40 to 49 years old (see Figure 7).

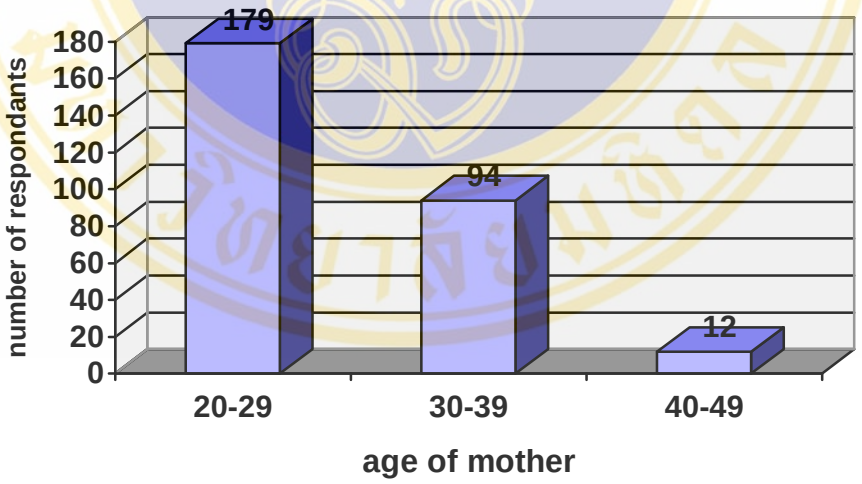


Figure 7 The number of respondent in each group

The majority of respondents (90.88%) were married. About 4.91% were single mothers, and the remained were separated (3.51%), and divorced 0.70%. It is noted that there were no widowed in this sample. Figure 8 shows the number of respondents by each group of marital status.

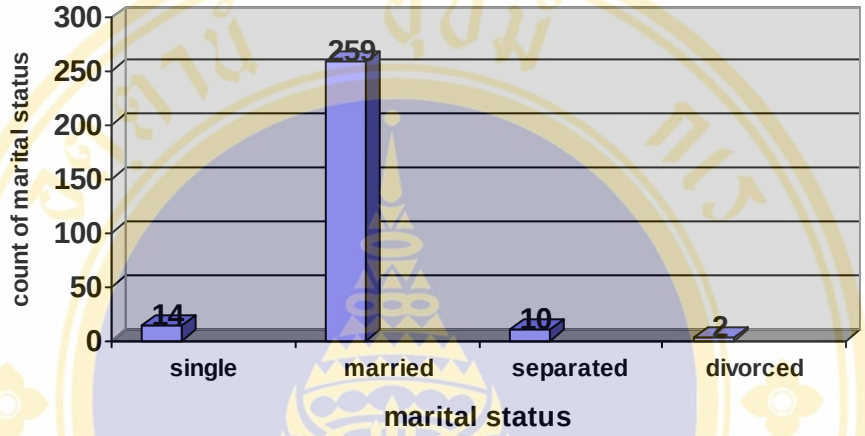


Figure 8 Number of respondent by marital status

The percentage of mothers with high levels of education was a small percentage. Education levels were therefore categorized into four groups: Grade 1-6 (30.53%), Grade 7-9 (junior) (23.86%), and 10-12 (senior) (21.40%) and Diploma and above 13-20 (24.21%). Figure 9 shows the number of respondents in each educational group.

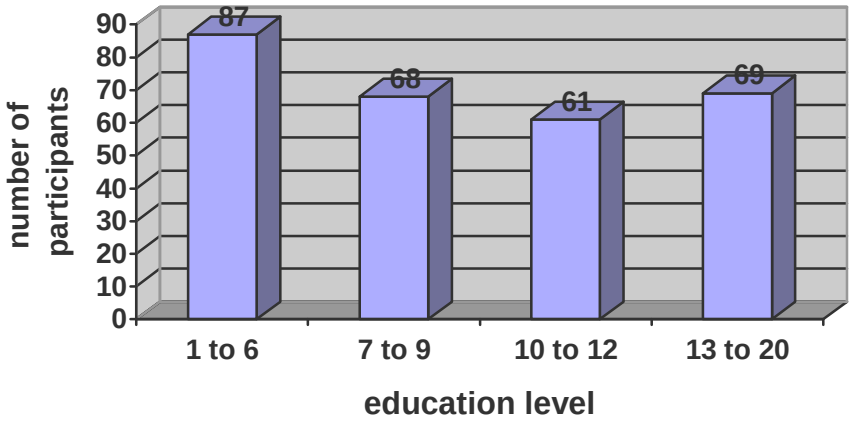


Figure 9 Number of respondent in four education group

Respondents were categorized by occupation into 5 groups. Most of the respondents were housewives (42.21%) or officer workers (25.42%). The remainders were laborers (11.58%), government official (10.53%) and sellers (5.26%). The number of respondents in each occupation group is shown in Figure 10.

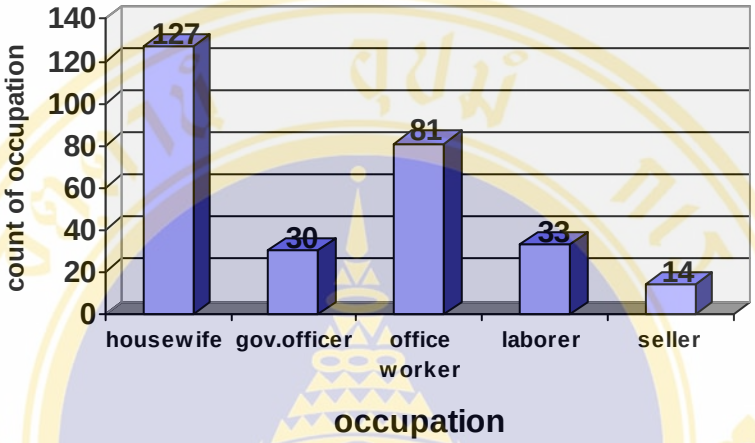


Figure 10 The number of respondent in each occupational group

Respondents were categorized by sufficiency family income into 3 groups. Figure 11 shows the number of respondents in each group. About 58.60% had enough for saving, 35.79% had enough money for expenses but not saving, and the remainder (5.61%) earned less than their living expense and accrued debt.

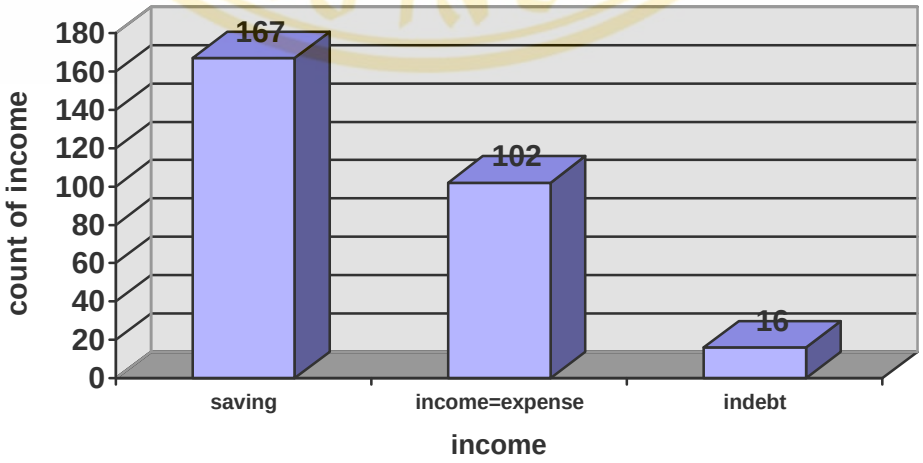


Figure 11 The number of respondent in each sufficient group of family income

The majority of respondents (75.09%) planned to have their children and 24.91% had unplanned children. The number of respondents in the 2 groups is shown in Figure 12.

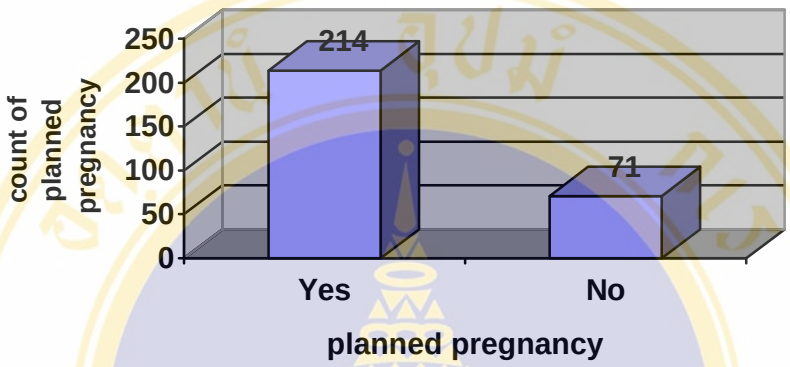


Figure 12 The number of respondent by planned or unplanned pregnancy

From the number of baby's gender expectation, about 80% of the respondent expect for the baby's gender and have this child as their expectation while 20% of them were disappointed with their baby's gender (see Figure 13).

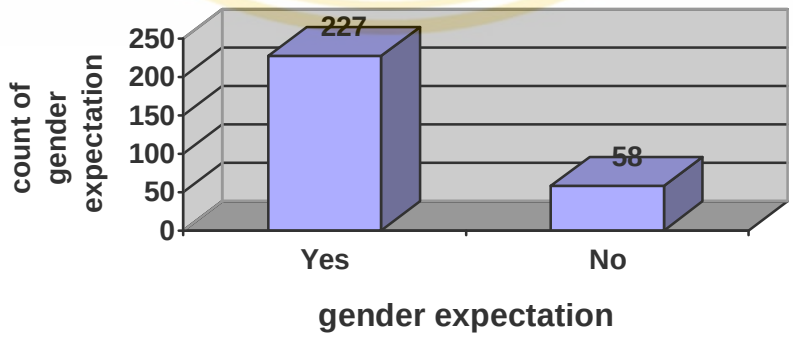


Figure 13 The number of respondent in two groups of baby's gender expectation

4.1.2 Descriptive analysis of the self-efficacy , social support , and maternal depression

Table 5 shows means, standard deviations, actual ranges, and possible ranges for 3 continuous variables.

Table 5 Scale used, means, standard deviations, and ranges of maternal self-efficacy, social support and maternal depression

Variables	Scale used	Mean	SD	Actual Range	Possible Range
Self-efficacy	SICS	74.53	15.67	24.6- 100	0-100
Social support	PRQ	129.92	14.54	74-170	25-175
Depression	HRSR	18.12	6.62	5-52	0-60

Note. SICS=Self-efficacy in Infant care scale; PRQ= Personal Resource Questionnaire (Part II); HRSR= Health-Related Self-Report.

Respondents were categorized as depressed or not-depressed mothers. Using the HRSR, mothers reporting scores below 25 were labeled as not depressed and those with scores 25 or above were labeled as depressed Using this system, the majority of mothers (87.37%) reported no depression while 12.63% were depressed (see Figure14).

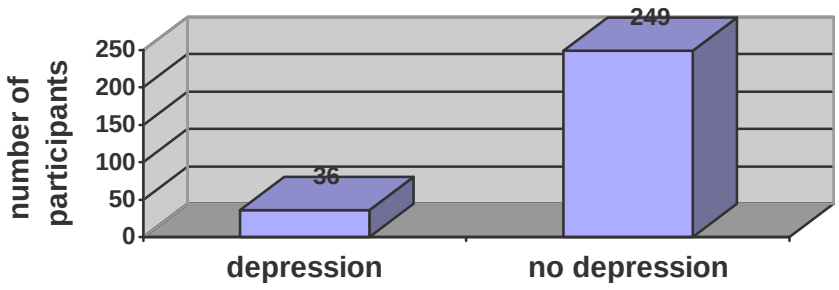


Figure 14 The number of respondent in two groups of maternal depression

Further analysis of only maternal depression group (n=36) was performed. Result showed no relationships between socio-demographic characteristics, self-efficacy, social support, and depression (refer to Appendix E).

Part II

4.2 Correlation analyses presents the associations of each independent variable with the dependent variable

In order to determine the relationship of socio-demographic characteristics, maternal self-efficacy, and social support to maternal depression, correlation analyses were performed. Chi-square tests were used to examine the relationships between any 2 categorical variables while Pearson's Product Moment Correlation tests were conducted to determine the relationship between any 2 continuous variables. Multiple regression analysis was finally used to identify the predictors of depression.

4.2.1 Bivariate analyses between socio-demographic characteristics, s self-efficacy, social support, and depression

In the bivariate analysis, two variables which were maternal characteristics were found to be significantly related to maternal depression. Higher educated mothers showed higher levels of depression, whereas mothers reporting lower in sufficient family incomes had low depression. As expected, mothers with high self-efficacy and social support had low level of depression. Table5 and 6 show all the bivariate analyses results.

Table 6 Pearson's Correlation between age, education level, maternal self-efficacy, social support, and maternal depression

Variables	Self-efficacy (r)	Social support (r)	Depression (r)
Maternal Age	0.093	0.030	-0.100
Education level	0.144**	0.035	0.123*
Maternal self-efficacy		0.395	-0.135
Social support	0.393**		-0.171**

*p<.05, **p<.01

Table 7 Chi-square tests marital status, occupation, sufficient family income, planned pregnancy, and gender expectation and maternal depression

Variables	χ^2	p-value
Marital status	0.196	0.658
Occupation	0.156	0.695
Sufficient family income	9.877	0.007*
Planned pregnancy	2.763	0.096
Gender expectation	1.402	0.236

*p<.01

Hypothesis 1.1 proposed that adult mothers would be related to low level of maternal depression. Using Pearson's Product Moment Correlation tests, there were no significant associations between maternal age with maternal self-efficacy (r=.093, p = .118), social support (r = .030, p =.615), and maternal depression (r = -.100, p =.092). Thus, hypothesis 1.1 is not supported.

Hypothesis 1.2 proposed that single mothers are more likely to experience depression than married mothers. To test this hypothesis, respondents were categorized as married or single (including widowed and divorced) mothers. They were also categorized as depressed or not -depressed (see supra.) Using a chi-square test, there was no significant association between marital status and maternal depression (χ^2(1, N=285) =.196, p=.658). Thus, the hypothesis is not supported.

Hypothesis 1.3 proposed that high education level of mother would be related with low maternal depression. Using Pearson's Product Moment Correlation tests, there was significant association of education level with maternal depression(r = .123, p =.038). The result also showed that the relationship between education level and maternal self-efficacy (r=.144, p = .015), but no relationship between education level and social support (r = .035, p =.555). Thus, hypothesis 1.3 is not supported.

Hypothesis 1.4 proposed that unemployed mothers are more likely to experience high level of maternal depression. To test this hypothesis, occupation was categorized into 2 groups: non working mothers (housewives or unemployed) and working mothers (government and state enterprise official, office worker, laborer or wage earns, and seller or self-employed). Using chi-square test, there was no significant associations between occupation and maternal depression (χ^2(1, N=285) =.196, p=.658). Thus, hypothesis 1.4 is not supported.

Hypothesis 1.5 proposed that sufficient family income would be related with high level of maternal depression. Using chi-square test, there was a significant association between sufficiency of family income and maternal depression (χ^2(2, N=285) =9.877, p=.007). Thus, hypothesis 1.5 is supported.

Hypothesis 1.6 proposed that planned pregnancy would be related with to low level of maternal depression. Using chi-square test, there was no significant associations between planned pregnancy and maternal depression (χ^2(1, N=285) =2.763, p=.096).Thus, hypothesis 1.6 is not supported.

Hypothesis 1.7 proposed that planned baby's gender as a parental expectation would be related with low level of maternal depression. Using chi-square test, there were no significant associations between gender expectation and maternal depression (χ^2(1, N=285) =1.402, p=0.236). Thus, hypothesis 1.7 is not supported.

Hypothesis 2 proposed that high maternal self-efficacy is correlated with low maternal depression. Using Pearson's Product Moment Correlation tests, there was negatively significant associations between maternal self-efficacy and maternal depression (r = -.135, p =.028). Thus, hypothesis 2 is supported.

Hypothesis 3 proposed that high social support is correlated with low maternal depression. Using Pearson's Product Moment Correlation tests, there was negatively significant associations between maternal self-efficacy and maternal depression (r = -.171, p =.004). Thus, hypothesis 3 is supported.

4.2.2 Multivariate analysis between independent and dependent variables

Results of bivariate analyses indicated that education level, sufficient family income, maternal self-efficacy, and social support were significantly correlated to maternal depression. Multiple regressions were used to examine factors that predict depression. The results are shown in Table 8.

Table 8 Multiple regression analysis between education levels, sufficient family income, self-efficacy, social support and maternal depression

Factors	**b**	**t**	**p-value**
Education level	0.3868	3.58	0.001**
Sufficient family income	2.3645	3.52	0.001**
Self-efficacy	-0.0038	- 1.96	0.051
Social support	-0.056	- 2.00	0.046*
R^2 = 9.5	R^2_{adj} = 8.2	S.E = 6.35	N=285

P<.01**, P<.05*

In Table 7 when all significant variables were included in the multiple regression analysis, it was found that there was a correlation between education level of

mother, sufficient family income, social support and maternal depression. However maternal self-efficacy was not a significant determinant to predict the maternal depression.

Stepwise multiple regressions were performed to find the most effective variables in predicting depression. The key independent variables which are self-efficacy and social support were entered first and then followed by education level and sufficient family income. Result showed that when controlling the effect of education level and sufficient family income in the model (see Table 9) Self-efficacy was not an effective predictor of depression in this study.

Table 9 Stepwise multiple regression analysis between education level, sufficient family income, self-efficacy, social support and maternal depression

Factors	**b**	**t**	**p-value**
Education level	0.39	3.52	0.001**
Sufficient family income	2.36	3.52	0.001**
Self-efficacy	-0.0039	- 1.96	0.051
Social support	-0.056	- 2.00	0.046*
$R^2 = 9.5$	$R^2_{adj} = 8.2$	S.E = 6.35	N=285

P<.01**, P<.05*

CHAPTER V
DISCUSSION

Postpartum depression is a serious disorder that affects approximately 13% of childbearing women (41). This disorder represents a significant public health concern not only due to its deleterious effects on the psychosocial well-being of the mother but also to the links between a mother's postpartum depression and the negative outcomes for her infant and the mother–infant relationship

Previous research from western countries has found that self-efficacy can reduce maternal depression (24). However, Thailand has limited research on relationship between maternal self-efficacy and maternal depression. Therefore, this study was conducted to assess the relationship between maternal self-efficacy and social support with maternal depression in Thai adult mothers with children under one year old. This chapter discusses the results of the study and comprises three parts as follows:

Part I 5.1 Study design and research methodology

Part II. 5.2 Relationship between socio demographic characteristic of mothers and maternal depression

Part III 5.3 The association between maternal self-efficacy and social support with maternal depression

5.1 Study design and research methodology

The cross-sectional analysis used self-administered questionnaires for collecting data. The target population was Thai adult mothers aged 20 years or above with children under one year old who attended the well child clinic at the pediatrics' out patient department at Samutsakhon Provincial Hospital. The questionnaire

consisted of 4 parts: socio-demographics of the mothers; maternal self-efficacy regarding infant general care; social support; and depression. A total of 65 questions were used to cover all research objectives of the study. Even though the questionnaire had 65 questions, all respondents could finish within 10 to15 minutes. Most participants were happy to take part in this study; however, some complained that the questionnaire was too long. 295 mothers were approached but only 285 questionnaires were completed and used for analysis. The respondent rate, therefore, was high (96.6%).

Before commencing data collection, each of the three research assistants received individually training by way of preparation. None of the research assistants were qualified health providers. This avoided the possibility that they might influence the respondents' answers, albeit unintentionally, because of their specialized knowledge. It, therefore, reduced the opportunity for bias.

Data collection took place from January 9 to January 21, 2009. The period was shorter than originally planned because 35 to 40 mothers per day took their babies to the clinic.

During the time of data collection, the questionnaire was clearly explained to the respondents and complete information could be received. The author and assistants supported the mothers by holding their babies and answering all questions when the mothers needed more explanations. The essential things in the process of data collection were the intention and good coordination of assistances. The good intention and coordination from assistances facilitated participates to respond questionnaire consistently.

5.2 Relationship between socio-demographic characteristics and maternal depression

Of the socio-demographic characteristics examined in this study, maternal education level was related to maternal depression. The interesting result is that the

mothers who had high education levels had higher level of depression. The significant finding of this study was probably due to mothers with high education worrying about their lives and their babies. To support this argument, education is the major foundation for thought process and decision-making. Education makes mothers aware of the importance and benefit of knowledge-seeking for childcare, and be more skillful in utilizing useful resource (56). This result was inconsistent with some previous studies that have found that low education is a risk factor in mental health disorders, particularly depression (58, 59). However, an update of two meta-analyses of over 10,000 subjects found level of education was not associated with maternal depression (60, 61).

Education levels of mother have also been related to maternal self-efficacy. It is not surprising that the mothers who have high education would be high confident in infant care. This might be due to the fact that better educated mothers have greater access to knowledge from outer world and community service, and also could allocate the resource more efficiently that provide them with information, instrument, emotional, and appraisal support for successful parenting (15, 55).

Economic pressure is related to parents' depressed moods and to marital conflict, which, in turn, affects their ability to be nurturing, involved parents. However, a majority of mothers in this study had no economic problems in their families which related to the low rate of depression. This supports many previous studies that have shown that low income is related to high maternal depression (6, 43, 57, 58, 59).

It is also worthwhile establishing which factors have no relationship with maternal depression. This study has shown that neither age, marital status, occupation, planned pregnancy, nor gender expectation has any relationship with maternal depression.

It has been well documented that adolescent mother is the high risk population for depression (6, 8, 9, 32, 43). However, this study was focused on mother

who aged above 20 to avoid high risk group of depression. Age is one of the factors which can indicate about one's maturity in many dimensions. Adult mothers are more mature and ready physically, emotionally, socially, and intellectually. They have more life experience than teenage mothers. The current study found that a majority of mothers (62.59%) were aged 20-29 years old, and that age was not correlated with maternal depression. The result was consistent with the result of O'Hara and Beck CT (60,61)

As expected, this study showed that the majority of respondents was married and marital status has no relationship to maternal depression. This result is not surprising since a supportive relationship with a father can help mitigate the stresses of being a new mother. This is should be when evaluating the contribution of marital status as a factor in the development of maternal depression (62)

Mother's occupation has been cited as small risk factors of postpartum depression (59, 60, 61). In this study the majority of mothers were housewives (unemployed). However, occupation had no relationship with maternal depression which contrasts with the results of previous studies. This might be because Thai housewives have spouse support.

The survey result also showed that more than half of this population has planned pregnancy and there was no relationship between planned pregnancy and maternal depression. The result was in line with previous study conducted in western society indicating association of maternal depression with unplanned pregnancy, it has found 47% of mothers reported some symptoms of depression within 9 months following the birth of their children, These symptoms level of depression were significant higher among mothers having unplanned birth compared to mothers having a planned birth (66). Parents who have a birth resulting from an unplanned pregnancy are less likely to be in a committed relationship, less likely to move into a more formal union, and more likely to have high levels of relationship conflict and unhappiness which all theses would lead to have depression in someway. The researches have been

reported for associations between unplanned or unwanted pregnancies (67, 68) and postpartum depression (42, 66)

The majority of mothers in this study wanted babies of a particular gender. However, data analysis showed that a baby's gender had no relationship to maternal depression. This was in line with studies conducted within western society which also found no association between the gender of a child and postpartum depression. However, recent studies from India (59) and China (63) suggest that spousal disappointment with the gender of a baby, especially if the baby is a girl, is significantly associated with developing postpartum depression. Therefore, the parental reaction to the gender of a baby may be a potential risk factor for postpartum depression within certain cultural groups.

5.3 Association between self-efficacy, social support and depression

This research revealed that there was a significant association between maternal self-efficacy and maternal depression. High maternal self-efficacy related to low levels of maternal depression. In other words, the mothers who are very confident in taking care of their babies could relate to the low risk of depression. On the contrary, mothers who have self-doubt tend to pay attention to their coping deficiency and to consider their environment in a negative way (29) that affect their sense of self-worth and produces depression (30).

Maternal self-efficacy is also related to social support. It means the mother who has confident taking care of her baby because of sufficient with the support with providers. It's not surprised with this result since the confident of the mother would be strong if mother sufficient with support from family, especially her husband. One interesting study reported maternal self-efficacy operated as a mediator variables between various psychosocial variables (including socio-demographic status, infant temperamental difficulty, social marital supports, and depression) (25). The result of this study should be explored more in further study to find out that maternal self-efficacy is the mediator in other variable or not.

This study result revealed a negative correlation between social support and maternal depression which it is consistent with other research (41, 42, 65, 68). It means that women who do not receive good social support during pregnancy or after child birth are more likely to develop postpartum depression. Lack of social support is a well-established risk factors for postpartum depression. Receiving social support from friends and/or family during stressful times is thought to be a protective factor against developing depression (65).

However the result after stepwise multiple regression analysis between maternal self-efficacy, social support and maternal depression (by controlling education level and sufficient family income) showed that maternal self-efficacy had no significant correlation to maternal depression. But social support had significant to maternal depression. These finding confirm that maternal self-efficacy regarding infant care can not predict depression in this population but social support can.

This research may have a number of beneficial outcomes: most importantly it may contribute to a better understanding of the factors that can lead to maternal depression. In turn, this may assist health care personnel to develop more effective policy to reduce the cause of maternal depression and provide support the mother who is at risk. Early identification and intervention might be expected to reduce or prevent new cases. This research may therefore also suggest the importance of women themselves knowing how pregnancy and child birth may lead to maternal depression.

CHAPTER VI
CONCLUSION AND RECOMMENDATION

6.1 Conclusion

The prevalence of mental disorder especially depression is increasing world wide. Unipolar depression is expected to be the second most common significant cause of global burden of disease by year 2020. Women are at two times higher risk than men. In Thailand, the rates of outpatient and inpatient with mental health problems, especially major depression have been increasing rapidly. The prevalence of mental health problems was 55.9 and 186 per 100,000 Thai populations in 1997 and 2006 respectively. Pregnant woman and the mother after childbirth during the first year are the high risk group of depression, since it is a time of increased susceptibility of mother to a depressive episode, and also it's during this period that the infants require the most care. The negative impact of maternal depression may affect all aspects of individual's life, work, family, and may even lead to commit suicide. However the effect will be on children throughout their ages (from fetal life to the stage of adolescence), and the strongest effect will be on infant.

Previous studies from Western countries elicited certain factors that could reduce depression in mother in many ways. For-example; high self-efficacy, and satisfaction of social support especially from spouse could reduce the severity of depression in mother. In Thailand there were limited studies conducted on maternal self-efficacy. Most of those studies conducted in Thailand explored maternal self-efficacy and social support in adolescent's mothers. Some studies emphasized on maternal self-efficacy with ill or disable child. This study therefore aims to explore the relationship between maternal self-efficacy or social support, and maternal depression in Thai mothers who are having children under one year old

This cross-sectional study was conducted using structured questionnaire, and self reported technique. The questionnaire consisted of three parts; namely: 1) self-efficacy in infant general care 2) social support 3) maternal depression. Each part was tested for reliability. Cronbach's alpha coefficient of reliability was 0.86 for maternal self-efficacy in infant general health care, 0.83 for social support, and 0.79 for maternal depression which they were above standard. Data was collected from January 9 to January 21, 2009. A total of 295 mothers participated in this study and only 285 of them completed the questionnaire and were used for statistical analyses. With regard to univariate analysis, descriptive statistics was employed to calculate mean, standard deviation, frequency, and percentage of the variables. Similarly, bivariate analysis using Chi-square test for categorical data and Pearson's Product Moment Correlation for continuous data were used to assess the significant association between each independent variables of interest and maternal depression. Multiple regression analysis and Stepwise procedure were further employed to evaluate the magnitude of association and the predictive power of independent variables to maternal depression.

The results of bivariate analysis have found that low education level and sufficient family income have direct relationship with low maternal depression. High maternal self-efficacy and high social support have been found negatively correlated with low maternal depression. Result also showed the relationship between self-efficacy and social support. The result of multivariate analysis using the stepwise multiple regression procedure indicated that only social support was a predictor of maternal depression in this study.

6.2 Strength of the study

First, the questionnaires were constructed for Thai people. Even though a part of social support measurement using PRQ-85 was not developed by Thai expert, it was used by Thai people and was tested for validity and reliability.

Second, in this study the reliability was tested to see reliability value for questions by using cronbach's alpha and the result showed high cronbach's alpha in these variables.

Third, the response rate of the completed questionnaire was high.

6.3 Limitations and recommendation for further study

There are several limitations to be considered:

1. This cross-sectional study assessed variables at only one point in time, therefore, change and trends of depression in this population could not be studied. And also the cross-sectional design of the study did not allow the determination of causal effects.

2. The use of self- report questionnaire measures is well-known source of potential bias.

3. The categorized baby's gender expectation measures could have led to high percentage of right sex of baby's gender expectation. Since the question of gender's expectation had only 2 choices: yes (had baby as mother's expectation) and no (had baby not like mother's expectation) which it's not enough to get the information from the mothers because a lot of mothers told the author that they did not expect to have boy or girl and even though they did expect to have boy they would feel find if the baby was a girl. Thus, they did pick the choice "Yes" even though the baby was not as her expectation. These might make the rate of baby's gender expectation in answer "Yes" higher than it should be. It is suggested that the further study should provide more choices for mothers to answer; by adding the third choice of this question to be "feeling happy with both gender boy and girl".

4. The bivariate analysis found that self-efficacy had relationship with social support, and maternal depression. However multiple regression analysis using stepwise found no relationship between self-efficacy and other variables. One interesting study reported maternal self-efficacy as a mediator variable of various psychosocial variables including socio-demographic status, infant temperamental

difficulty, social marital supports, and depression (25). The further study is required to explore maternal self-efficacy as a mediator.

5. Several characteristic variables should be included in further study relating to maternal depression with children aged less than one year. For example, experiencing depressed mood or anxiety during pregnancy, the studies were found strong significant predictor of postpartum depression (41, 61), Life event, in meta-analysis study (41) have found a strong-moderate relationship between experiencing a life event and developing postpartum depression. Marital relationship, close link with finding of social support, increased risk of postpartum depression in women who experienced marital problems. (41, 61) A supportive relationship with the father can help mitigate the stresses of being a new mother. These stresses should be born in mind when evaluating the role factors in development of postpartum depression.

6. The Health-Related Self-Report (HRSR) questionnaire is the screening test for the major depression. The limitation of this questionnaire is that it cannot identify postpartum depression (PPD). That means the mothers who got the score higher than 25 was considered to be depressed. The cause of depression may be due to either PPD or major depression. It is suggested that mothers' poor bonding or no attachment with the baby be the key sign to differentiate between PPD and depression. According to the New York Sate Department of Health and Office of Mental Health, the crucial symptom of PPD is poor bonding with baby or no attachment (7).

6.4 Recommendations for implementation

1. Data from Ministry of Public Health indicated that the prevalence of major depressive episode in the general population aged 15-59 years old was 3.2% however in this study result showed 12.6% of mothers had depression. It implies that mother who visited well- baby clinic may suffer from depression more than general population. It is recommended that well-baby clinic should organize the programs to provide the knowledge to the mothers after childbirth such as "Child Care" or "Activities Practice" to help mother feel confident to take care her baby and to reduce chance of depression.

2. The hospital should provide the consult room for mothers who bring baby to vaccinate and need consult (either about baby or mother's health). And the hospital should train and identify mental health consultants with documented expertise in dealing with depression through family lens to work with pediatricians, early care and learning programs and women's health agency.

3. The current study result implies us that, besides focusing only mothers, their supporters should be in focused also. Since the predictor of depression was those mothers who perceive they have low of social support. The most important support for mother is from spouse. Therefore, to achieve the aim reducing risk for depression; spouse should be invited to join the program that the author mention above to help mother in infant care. The other thing that spouse should be educated is about physical and mental health of mother after childbirth. Since this period is high risk of becoming depression. All possible effort should be made to prevent the risk of depression.

4. Since both ante-natal and post natal mothers are at higher risk of depression, screening program for depression should be promoted and facilitated for every woman coming for ante-natal check up in order to assure accurate diagnosis, effective treatment, and follow up.

5. Health care providers should focus not only on the mothers belonging to lower socio-economic status and lower educational level, but also on those having higher socio-economic status and educational background.

6. Health care provider should be trained to manage depressive mothers from time to time. One recommendation is also to provide the up- to- date guidelines of depression management.

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APPENDIX

APPENDIX A

PERMISSION TO USE THE PERSONAL RESOURCE QUESTIONNAIR

PERMISSION TO USE THE PRQ85 and PRQ2000

IS GRANTED TO: Chutima Nitising

THE PRQ85 IS A TWO PART INSTRUMENT. EITHER PART -1 OR PART -2 OR BOTH PARTS MAY BE ADMINISTERED. HOWEVER, NO PART OF PRQ85 OR PRQ2000 MAY BE MODIFIED WITHOUT CONSULTATION WITH THE AUTHORS.

Clarann Weinert, SC,PhD,RN,FAAN DATE: October 13, 2008

APPENDIX B

ETHIC APPROVAL

COA. No. MU-IRB 2008/281.3012

Documentary Proof of Mahidol University Institutional Review Board

Title of Project. Relationship between Maternal Self-Efficacy, Social Support and Maternal Depression among Thai Adult Mothers with Children. Under One Year Old (Thesis for Master Degree)

Principle Investigator. Mrs. Chutima Nitising

Name of Institution. ASEAN Institute for Health Development

Approval includes. 1) MU-IRB Submission form version received date 29 December 2008
2) Participant Information sheet version date 29 December 2008
3) Informed consent form version date 2 December 2008

Mahidol University Institutional Review Board is in full compliance with International Guidelines for Human Research Protection such as Declaration of Helsinki, The Belmont Report, CIOMS Guidelines and the International Conference on Harmonization in Good Clinical Practice (ICH-GCP)

Date of Approval. 30 December 2008

Date of Expiration. 29 December 2009

Signature of Chairman. .....
(Professor Shusee Visalyaputra)

Signature of Head of the Institute. .....
(Associate Professor Sansanee Chaiyaroj)
Vice President for Research and Academic Affairs

Office of the President, Mahidol University, 999 Phuttamonthon 4 Rd., Salaya, Phuttamonthon District, Nakhon Pathom 73170. Tel. (662) 8496223-5 Fax. (662) 8496223

ที่ สค ๐๐๒๗.๒ /พิเศษ

โรงพยาบาลสมุทรสาคร
ถนนเอกชัย สค ๗๔๐๐๐

๒๐ ธันวาคม ๒๕๕๑

เรื่อง แจ้งผลการพิจารณาโครงการวิจัย

เรียน นางชุติมา นิติสิงห์

ตามที่ผู้วิจัยได้ส่งโครงการวิจัยเรื่อง ความสัมพันธ์ ระหว่างความมั่นใจในความสามารถของมารดาในการดูแลทารก การรับรู้ต่อแรงสนับสนุนทางสังคม และภาวะซึมเศร้าของมารดาที่มีบุตรอายุต่ำกว่า ๑ ปี (Relationship between maternal self-efficacy, social support and maternal depression among Thai adult mothers with children under one year old) เพื่อพิจารณาระเบียบวิธีวิจัย และจริยธรรมจากคณะกรรมการจริยธรรมองค์กร โรงพยาบาลสมุทรสาคร เพื่อประกอบการพิจารณาสนับสนุนการเก็บข้อมูลนั้น

คณะกรรมการฯ ได้พิจารณาระเบียบวิธีวิจัย และจริยธรรม แล้ว มีมติอนุมัติให้ผู้วิจัยดำเนินการตามขั้นตอนต่อไปได้ เมื่อผู้วิจัยได้ทำวิทยานิพนธ์เสร็จสิ้นแล้ว กรุณาส่งวิทยานิพนธ์ ให้คณะกรรมการฯ 1 ฉบับ

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายวีรศักดิ์ ครองลาภเจริญ)
ประธานคณะกรรมการจริยธรรมองค์กร โรงพยาบาลสมุทรสาคร

กลุ่มพัฒนาระบบบริการสุขภาพ
โทร. ๐ ๓๔๔๒ ๗๐๙๙ ต่อ ๒๑๐๗ - ๘
โทรสาร. ๐ ๓๔๔๒ ๗๐๙๙ ต่อ ๒๑๐๙

APPENDIX C
PARTICIPANT INFORMATION SHEET

เอกสารชี้แจงผู้เข้าร่วมการวิจัย
(Participant Information Sheet)

ในเอกสารนี้อาจมีข้อความที่ท่านอ่านแล้วยังไม่เข้าใจ โปรดสอบถามหัวหน้าโครงการวิจัย หรือผู้แทนให้ช่วยอธิบายจนกว่า จะเข้าใจดี ท่านจะได้รับเอกสารนี้ 1 ฉบับ นำกลับไปอ่านที่บ้านเพื่อปรึกษาหารือกับญาติพี่น้อง เพื่อนสนิท แพทย์ประจำตัวของท่าน หรือผู้ที่ท่านต้องการจะปรึกษา เพื่อช่วยในการตัดสินใจเข้าร่วมการวิจัย

ชื่อโครงการ ความสัมพันธ์ ระหว่างความมั่นใจในความสามารถของมารดา ในการดูแลทารก, การรับรู้แรงสนับสนุนทางสังคมและภาวะซึมเศร้าของมารดาที่มีบุตรอายุต่ำกว่า *1* ปี

ชื่อผู้วิจัย คุณ ชุติมา นิติสิงห์

สถานที่วิจัย สถานที่ทำงานและหมายเลขโทรศัพท์ที่ติดต่อได้ทั้งในและนอกเวลาราชการ
สำนักงานหลักสูตรการบริหารสาธารณสุขมูลฐานมหาบัณฑิต สถาบันพัฒนาการสาธารณสุขอาเซียน มหาวิทยาลัยมหิดล ถ.พุทธมณฑล สาย *4* ต.ศาลายา อ.พุทธมณฑล จ.นครปฐม *73170* หมายเลขโทรศัพท์ที่สามารถติดต่อในเวลาราชการ *02- 2441 9040-3 FAX: 02- 441 9044* หมายเลขโทรศัพท์ที่สามารถติดต่อนอกเวลาราชการ 083-*4353629*

โครงการวิจัยนี้ทำขึ้นเพื่อ หาปัจจัยที่มีความสัมพันธ์กับภาวะซึมเศร้าในมารดาที่มีบุตรอายุอยู่ในช่วง 1 ปี สำรวจหาความสัมพันธ์ระหว่างความมั่นใจในความสามารถของมารดาในการดูแลบุตรและภาวะซึมเศร้า สำรวจหาความสัมพันธ์ระหว่างการรับรู้ต่อแรงสนับสนุนทางสังคมและภาวะซึมเศร้า การเข้าร่วมโครงการวิจัยโดยความสมัครใจของท่าน จะเป็นประโยชน์อย่างยิ่งต่อมารดาที่มีบุตรต่ำกว่า 1 ปี ในการที่จะตระหนักถึงภาวะซึมเศร้าที่อาจเกิดขึ้นได้ภายหลังการคลอดบุตร ทั้งนี้ ผลสรุปจากโครงการวิจัยยังสามารถช่วยให้ผู้ที่มีหน้าที่รับผิดชอบในการบริหารสาธารณสุข ในด้านแม่และเด็ก ให้พิจารณาถึงความสำคัญของภาวะซึมเศร้าที่จะเกิดในมารดา ช่วง 1 ปี หลังคลอด ซึ่งเป็นช่วงที่มีโอกาสมากที่สุด เพื่อหาแนวทางสนับสนุน ป้องกันโดยลดปัจจัยที่ก่อให้เกิดและร่วมถึง ช่วยดูแลมารดาที่อยู่ในภาวะเสี่ยง ซึ่งการแจ้งให้มารดาทราบถึงอาการที่อาจจะเกิดและปัจจัยส่งเสริมการเกิด จะช่วยลดการเกิดภาวะซึมเศร้าได้

ท่านได้รับเชิญให้เข้าร่วมการวิจัยนี้เพราะ ท่านเป็นคนไทย สามารถอ่านและเขียนภาษาไทยได้ มีอายุตั้งแต่ *20* ปีขึ้นไป และมีบุตรอยู่ในช่วงอายุ *1* ปี การวิจัยนี้ ต้องการแสดงให้ทราบถึง ความสัมพันธ์ระหว่าง ความมั่นใจในความสามารถของมารดาในการดูแลบุตร การรับรู้ต่อแรงสนับสนุนทางสังคมและภาวะซึมเศร้าของมารดาที่มีบุตรอายุต่ำกว่า *1* ปี ซึ่งผลลัพธ์ของงานวิจัย อาจช่วยสนับสนุนให้เจ้าหน้าที่ด้านสาธารณสุข หาแนวทางป้องกันการเกิดภาวะซึมเศร้าในมารดาในประเทศไทยได้

จะมีผู้เข้าร่วมการวิจัยนี้ทั้งสิ้นประมาณ 279 คน ระยะเวลาที่จะทำงานวิจัยทั้งสิ้น 9 เดือน คือ ตั้งแต่เดือนสิงหาคม 2551- เมษายน 2552 ซึ่งระยะเวลานี้หมายถึง ระยะเวลาที่เริ่มต้นทำงานวิจัย หาข้อมูล เก็บข้อมูล วิเคราะห์ข้อมูลและเขียนรายงาน

หากท่านตัดสินใจเข้าร่วมการวิจัยแล้ว จะมีขั้นตอนการวิจัยดังต่อไปนี้คือ

1. ทำแบบสอบถาม ระหว่างที่รอพบแพทย์นัด ซึ่งจะใช้เวลาในการทำแบบสอบถามประมาณ 15 นาที

2. ท่านสามารถถามคำถามที่ไม่เข้าใจ หรือสงสัยกับผู้ทำวิจัยหรือผู้ช่วยได้ตลอดเวลาระหว่างทำแบบสอบถาม

3. ท่านสามารถให้ผู้ทำวิจัย หรือผู้ช่วย ช่วยอ่านแบบสอบถามให้ ถ้าท่านไม่สะดวกในการอ่านแบบสอบถามด้วยตนเอง

4. ท่านมีสิทธิ์ที่จะไม่ตอบคำถาม หรือ หยุดทำแบบสอบถามได้เสมอถ้าท่านรู้สึกไม่สบายใจในการตอบแบบสอบถามหากท่านไม่เข้าร่วมในโครงการวิจัยนี้ ลูกของท่านก็จะได้รับการตรวจตามวิธีการที่เป็นมาตรฐาน และหากมีข้อข้องใจที่จะสอบถามเกี่ยวข้องกับการวิจัย ท่านสามารถที่จะติดต่อผู้วิจัย คุณชุติมา นิติสิงห์ หมายเลขโทรศัพท์ 083-4353629 ได้ตลอดเวลา

ผู้วิจัยจะขอแสดงความขอบคุณต่อผู้เข้าร่วมงานวิจัย โดยให้ของที่ระลึกซึ่งอาจเป็น หนังสือเด็กเพื่อสนับสนุนให้มารดาอ่านหนังสือให้บุตรฟัง หรือเสื้อเด็กเล็ก และจะไม่มีค่าใช้จ่ายที่ผู้เข้าร่วมการวิจัยจะต้องรับผิดชอบเอง

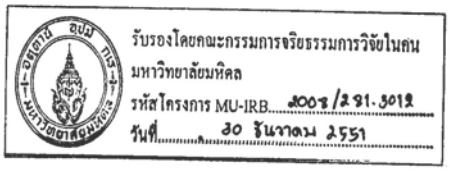
- หากมีข้อมูลเพิ่มเติมทั้งด้านประโยชน์และความเสี่ยงที่เกี่ยวข้องกับการวิจัยนี้ผู้วิจัยจะแจ้งให้ทราบโดยรวดเร็ว ไม่ปิดบัง

- ข้อมูลส่วนตัวของผู้เข้าร่วมการวิจัยจะถูกเก็บรักษาไว้ ไม่เปิดเผยต่อสาธารณะเป็นรายบุคคลแต่จะรายงานผลการวิจัยเป็นข้อมูลส่วนรวม ข้อมูลของผู้เข้าร่วมการวิจัยเป็นรายบุคคลอาจมีคณะบุคคลบางกลุ่มเข้ามาตรวจสอบได้ เช่น ผู้ให้ทุนวิจัย, สถาบัน หรือองค์กรของรัฐที่มีหน้าที่ตรวจสอบ, คณะกรรมการจริยธรรมฯ เป็นต้น

- ผู้เข้าร่วมการวิจัยมีสิทธิ์ถอนตัวออกจากโครงการวิจัยเมื่อใดก็ได้ โดยไม่ต้องแจ้งให้ทราบล่วงหน้า และการไม่เข้าร่วมการวิจัยหรือถอนตัวออกจากโครงการวิจัยนี้ จะไม่มีผลกระทบต่อการบริการและการรักษาที่สมควรจะได้รับแต่ประการใด

โครงการวิจัยนี้ได้รับการพิจารณารับรองจากคณะกรรมการจริยธรรมการวิจัยในคนของมหาวิทยาลัยมหิดล ซึ่งมีสำนักงานอยู่ที่ สำนักงานอธิการบดีมหาวิทยาลัยมหิดล ถนนพุทธมณฑล สาย 4 ตำบลศาลายา อำเภอพุทธมณฑล จังหวัดนครปฐม 73170 หมายเลขโทรศัพท์ 02-849-6241-6, 02-849-6066 โทรสาร 02-849-6247 หากท่านได้รับการปฏิบัติไม่ตรงตามที่ระบุไว้ ท่านสามารถติดต่อกับประธานคณะกรรมการฯ หรือผู้แทน ได้ตามสถานที่และหมายเลขโทรศัพท์ข้างต้น

ข้าพเจ้าได้อ่านรายละเอียดในเอกสารนี้ครบถ้วนแล้ว



APPENDIX D

QUESTIONNAIRE

Part-1 Socio-demographic characteristics

Please fill in the blank or check × in the appropriate box to answer the question:

1. How old are you?.....years

2. Date of birth? (dd/mm/yy)…….

3. Marital status
   ❑Married ❑ Single ❑ Widowed
   ❑ Divorced ❑ Separated

4. What is your education level?

(Please check (×) on the number that is the total years of your education)

Number of year » 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17+
(Primary 1-6) (Secondary7-12) (Baccalaureate)

5. What is your main occupation?
   ❑ Housewife/unemployed
   ❑ Government officer or state enterprise officials
   ❑ Office worker
   ❑ Laborer and wager
   ❑ Trader or self-employed
   ❑ Others

6. Sufficiency of family income
   ❑ Have saving
   ❑ Income=Outcome
   ❑ In debt

7. How many children in your family……
8. Is this child on of family plan to have the baby ❑ Yes. ❑ No.

9. Is gender of this child as your expectation? ❑ Yes. ❑ No.

Part II Maternal Self-Efficacy Scale

If you don't have any experience as following question, please consider as you were in kind of that situation would you confident to be able to take care of your child.
Please consider the percent of the confidence to × on the number of percent

For example

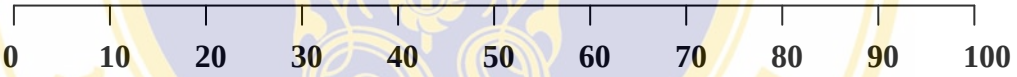
I am confident that I am able to give mouth care wash to my baby everyday.

not confident at all **moderate confident** **definitely confident**

Explanation of the result: It means that you are definitely confident to be able to give the mouth care wash to baby everyday.

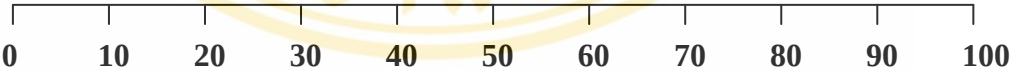
☺ If you understand please continue.

1. I am confident that I am able to give mouth care wash to my baby everyday.

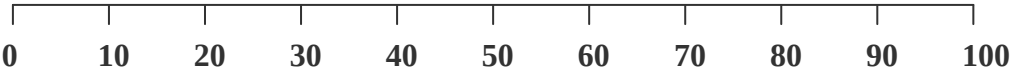


2. I am confident that I am able to use a section bulb correctly when my baby has phlegm.

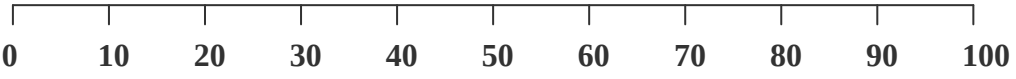
3. I am confident that I am able to give my baby medication without choking him/her.



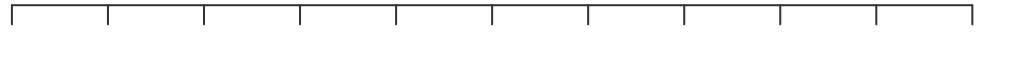
4. I am confident that I am able to use thermometer correctly when taking my baby's temperature.



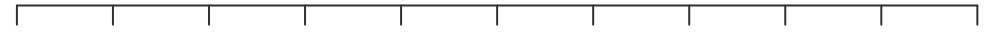
5. I am confident that I am able to prevent my baby from getting diaper rash.



6. I am confident that I am able to decide when I should my baby a tepid sponge when she/he has fever.



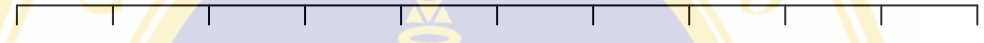
7. I am confident that I am able to relieve gas pain in my baby.



not confident at all **moderate confident** **definitely confident**

8. I am confident that I am able to tell the different between vomiting and milk spitting.

9. I am confident that I am able to tell whether my baby bowel moments are normal.

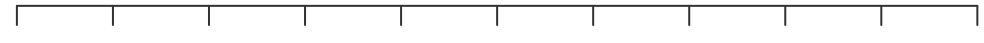


10. I am confident that I am able to give proper care when my baby get mild diarrhea.

11. I am confident that I am able to decide whether my baby diarrhea should see a doctor.

12. I am confident that I am able to give proper care when my baby has a seizure.

13. I am confident that I am able to give proper care to prevent suffocation when my baby is vomiting.



Part III Perceived Social Support

Q-11. Below are some statements with which some people agree and others disagree. Please read each statement and ✘ the response most appropriate for you. There is not right or wrong answer.

1 = STRONGLY DISAGREE
2 = DISAGREE
3 = SOMEWHAT DISAGREE
4 = NEUTRAL
5 = SOMEWHAT AGREE
6 = AGREE
7 = STRONGLY AGREE

1. There is someone I feel close to who make me feel secure

1 2 3 4 5 6 7

Strongly disagree Neutral Strongly agree

2. I belong to a group in which I feel important

1 2 3 4 5 6 7

Strongly disagree Neutral Strongly agree

3. People let me know that I do well at my work (job, homemaking).

1 2 3 4 5 6 7

Strongly disagree Neutral Strongly agree

4. I can't count on my relatives and friends to help me with my problems.

1 2 3 4 5 6 7

Strongly disagree Neutral Strongly agree

5. I have enough contact with the person who makes me feel special.....

1 2 3 4 5 6 7

Strongly disagree Neutral Strongly agree

6. I spend time with others who have the same interests I do

1 2 3 4 5 6 7

Strongly disagree Neutral Strongly agree

7. There is little opportunity in my life to be giving and caring to another person.

Strongly disagree Neutral Strongly agree

8. Others let me know that they enjoy working with me (job, committees, projects)

Strongly disagree Neutral Strongly agree

9. There are people who are available if I needed help over an extended period of time.

Strongly disagree Neutral Strongly agree

10. There is no one to talk to about how I am feeling…

Strongly disagree Neutral Strongly agree

11. Among my group of friends we do favors for each other.

Strongly disagree Neutral Strongly agree

12. I have the opportunity to encourage others to develop their interests and skills...

Strongly disagree Neutral Strongly agree

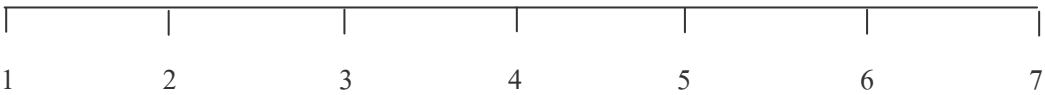
13. My family lets me know that I am important for keeping the family running...

Strongly disagree Neutral Strongly agree

14. I have relatives or friends that will help me out even if I can't pay them back.....

Strongly disagree Neutral Strongly agree

15. When I am upset there is someone I can be with who lets me be myself..



Strongly disagree Neutral Strongly agree

16. I feel no one has the same problems as I ...

Strongly disagree Neutral Strongly agree

17. I enjoy doing little "extra" things that make another person's life more pleasant....

Strongly disagree Neutral Strongly agree

18. I know that others appreciate me as a person

Strongly disagree Neutral Strongly agree

19. There is someone who loves and cares about me

Strongly disagree Neutral Strongly agree

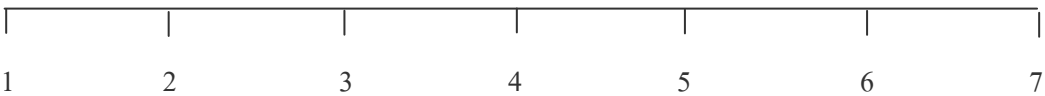
20. I have people to share social events and fun activities with

Strongly disagree Neutral Strongly agree

21. I am responsible for helping provide for another person's needs

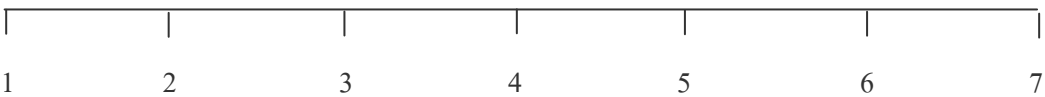
Strongly disagree Neutral Strongly agree

22. If I need advice there is someone who would assist me to work out a plan for dealing with the situation...



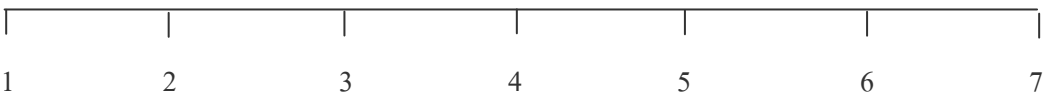
Strongly disagree Neutral Strongly agree

23. I have a sense of being needed by another person



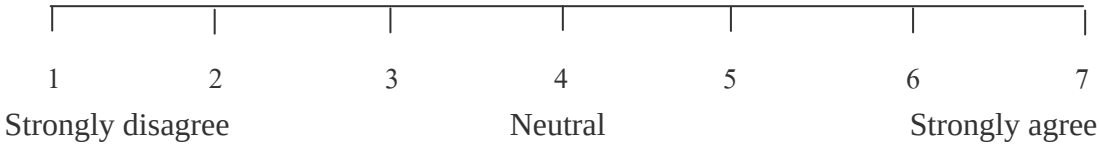
Strongly disagree Neutral Strongly agree

24. People think that I'm not as good a friend as I should be.....



Strongly disagree Neutral Strongly agree

25. If I got sick, there is someone to give me advice about caring for myself



Part IV Maternal Depression

Please ✕ on the number most correspond to your health or feeling on behaviors during this two week periods.

3 means Frequent= almost everyday
2 means Rather Frequent= 2-3/week
1 means Sometimes= average weekly
0 means Never

1. Poor appetite/anorexia

2. Can not sleep or need sleeping pills.

3. Easily fatigue or low energy

4. Worry or over concern

5. Feel well

6. Feel Bored or sulk(less talkative

7. Poor concentration

8. Don’t want to do anything or Social withdrawal

9. Feel sad, depressed

10. Life is present, meaningful

11. Tearfulness or want to cry

12. Difficulty in making decision

13. Unhappy with life

14. Morning sadness (after wake up)

15. Feel self-worth

16. Criticize or blame myself

17. Loss of interest, fed up with everything

18. Have suicidal idea or wished for death

0	1	2	3
Never	Sometimes	Rather Frequent	Frequent

19. People said I look worried or sad

0	1	2	3
Never	Sometimes	Rather Frequent	Frequent

20. Have attempted suicide ☐Yes ☐ No

☺ **THANK YOU** ☺

QUESTIONNAIRE IN THAI VERSION

No……..... **วันที่……**

แบบสอบถาม

ความความสัมพันธ์ ระหว่างความมั่นใจในความสามารถของมารดาในการดูแลทารก การรับรู้ต่อแรงสนับสนุนทางสังคม และภาวะซึมเศร้าของมารดาที่มีบุตรอายุต่ำกว่า 1 ปี

วัตถุประสงค์ของแบบสอบถาม

แบบสอบถามนี้ได้ถูกออกแบบขึ้นเพื่อรวบรวมข้อมูลส่วนตัว ความมั่นใจของมารดาในการดูแลทารก การรับรู้ต่อแรงสนับสนุนทางสังคม และ ภาวะซึมเศร้า ข้อมูลที่รวบรวมได้ทั้งหมดจะถูกเก็บเป็นความลับเฉพาะสำหรับผู้วิจัยและผู้ร่วมวิจัยเท่านั้น

คณะวิจัยมีความประสงค์ที่จะทราบถึง ปัจจัยที่มีผลกระทบต่อ ภาวะซึมเศร้าหลังคลอด ทั้งนี้คำถามทุกข้อไม่มีคำตอบที่ถูกหรือผิด โดยปกติ ความคิดเห็นแรกของท่านจะเป็นคำตอบที่ดีที่สุด

คำตอบที่สำคัญสำหรับผู้วิจัยคือความคิดเห็นของท่าน หากท่านมีข้อสงสัยประการใดผู้วิจัยยินดีจะตอบข้อซักถามของท่าน

☺ ขอขอบคุณที่สละเวลาเข้าร่วมโครงงานวิจัย ☺

ข้อมูลส่วนตัว☺

อายุ.....ปี **วันเกิด (วัน/เดือน/**

สถานภาพสมรส ❑ **โสด** ❑ **แต่งงาน** ❑ **แยกกันอยู่** ❑ **หย่าร้าง**

การศึกษา (โปรดกาเครื่องหมาย × ลงบนตัวเลขที่บ่งจำนวนปีสูงสุดที่เข้ารับการศึกษา)

จำนวนปี » 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

สถานภาพการทำงาน

❑**แม่บ้าน/ไม่ได้ทำงาน** ❑**ทำงานรัฐบาล หรือ รัฐวิสาหกิจ** ❑ **ทำงานบริษัท** ❑**รับจ้างทั่วไป** ❑**อื่นๆ (โปรด**

รายได้ของครอบครัว เปรียบเทียบกับค่าใช้จ่าย

❑ **มีเหลือเก็บ** ❑ **ไม่มีเหลือเก็บ(รายรับ=รายจ่าย)** ❑ **ขัด**

บุตรคนปัจจุบันคือบุตรที่ท่านวางแผนไว้ว่าจะมีใช่หรือไม่ ❑ **ใช่**

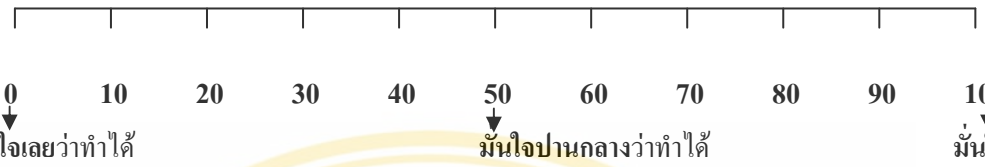
บุตรคนปัจจุบันคือบุตรที่มีเพศตามที่ท่านต้องการหรือไม่ ❑ **ใช่**

แบบสอบถามการรับรู้สมรรถนะของตนเองในการดูแลทารก

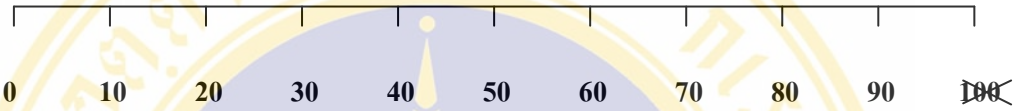
คำชี้แจง ข้อความต่อไปนี้เป็นเรื่องเกี่ยวกับการรับรู้ความมั่นใจของท่านใน**การเลี้ยงดูบุตรที่มีอายุระหว่างแรกเกิดถึงหนึ่งปี** ขอให้ท่านอ่านข้อความดังกล่าวแล้วพิจารณาว่าท่านมีความมั่นใจกี่เปอร์เซ็นต์ว่าท่านจะสามารถให้การเลี้ยงดูบุตรของท่านตามข้อความนั้น

☺ ถึงแม้ว่าท่านยังไม่มีประสบการณ์ตามข้อความนั้นๆ เลย ก็ขอให้ท่านพิจารณาว่าถ้ามีเหตุการณ์นั้นเกิดขึ้น ท่านมั่นใจกี่เปอร์เซ็นต์ว่าท่านจะสามารถให้การดูแลทารกได้ตามข้อความนั้น

<u>วิธีการตอบ</u> ให้ท่านพิจารณาระดับความมั่นใจของท่าน โดยให้ท่าน ✕ ตัวเลขที่แสดงถึงระดับความมั่นใจของท่าน



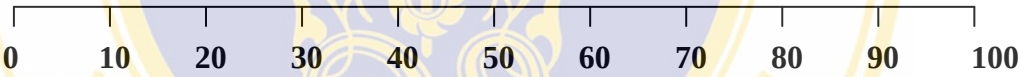
<u>ตัวอย่าง</u> **ฉันมั่นใจว่า ฉันสามารถทำความสะอาดปากและฟันของลูกได้ทุกวัน**



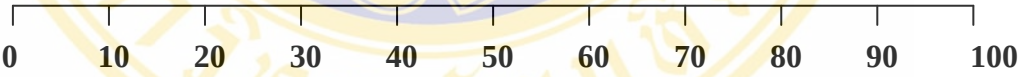
คำตอบนี้หมายถึง ➢ ท่านมีความมั่นใจมากที่สุดในการทำความสะอาดปากและฟันของลูกได้ทุกวัน

☺ ***เมื่อท่านเข้าใจวิธีการตอบและพร้อมที่จะตอบคำถามแล้ว โปรดตอบข้อความ***

1. ฉันมั่นใจว่า ฉันสามารถทำความสะอาดปากและฟันของลูกได้ทุกวัน

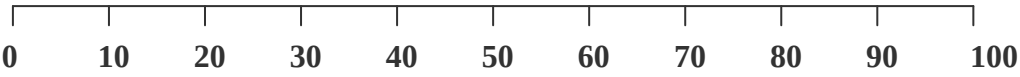


2. เมื่อลูกมีเสมหะ ฉันมั่นใจว่า ฉันสามารถใช้ลูกยางแดงดูดเสมหะออกจากปากหรือจมูกของลูกได้อย่างถูกต้อง

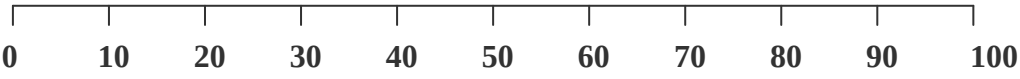


3. ฉันมั่นใจว่า ฉันสามารถป้อนยาให้ลูกได้โดยไม่ทำให้ลูกสำลัก

4. ฉันมั่นใจว่า ฉันสามารถใช้ปรอทวัดอุณหภูมิกายของลูกได้อย่างถูกต้อง

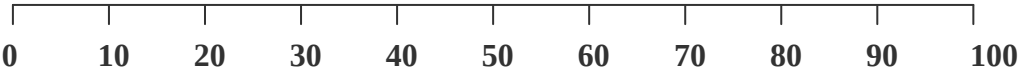


5. ฉันมั่นใจว่า ฉันสามารถดูแลไม่ให้ลูกเกิดผื่นผ้าอ้อมได้

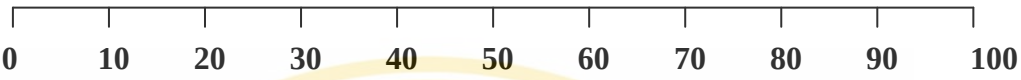


6. เมื่อลูกมีไข้ฉันมั่นใจว่า ฉันสามารถตัดสินใจได้ว่าเมื่อไรควรเช็ดตัวลดไข้ให้ลูก

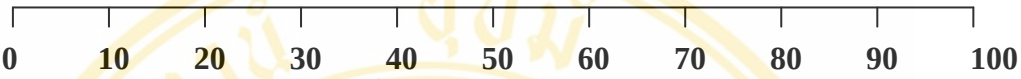
7. ฉันมั่นใจว่า ฉันสามารถหาวิธีการช่วยบรรเทาอาการท้องอืดให้กับลูกได้



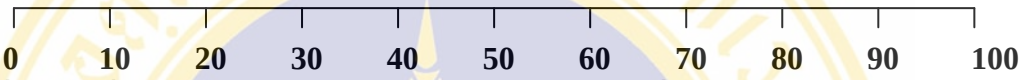
8. ฉันมั่นใจว่า ฉันสามารถแยกได้ระหว่างอาการอาเจียนและอาการแหวะนม



9. ฉันมั่นใจว่า ฉันสามารถบอกได้ว่าการถ่ายอุจจาระของลูกปกติหรือผิดปกติ



10. เมื่อลูกมีอาการท้องเสียไม่รุนแรง ฉันมั่นใจว่า ฉันสามารถให้การดูแลเบื้องต้นได้



11. ฉันมั่นใจว่า เมื่อลูกมีอาการท้องเสีย ฉันสามารถตัดสินใจได้ว่าเมื่อใดควรพาลูกไปพบแพทย์

12. ถ้าลูกมีอาการชัก ฉันมั่นใจว่า ฉันสามารถให้การช่วยเหลือเบื้องต้นเพื่อป้องกันอันตรายแก่ลูกได้

13. ถ้าลูกอาเจียน ฉันมั่นใจว่า ฉันสามารถให้การช่วยเหลือเบื้องต้นได้ เพื่อป้องกันการสำลักสิ่งที่ลูกอาเจียนออกมา

แบบสอบถามการรับรู้แรงสนับสนุนทางสังคม

คำชี้แจง ข้อความต่อไปนี้ บางท่านอาจเห็นด้วย บางท่านอาจไม่เห็นด้วย โปรดอ่านข้อความในแต่ละข้อ และ X ในข้อที่ท่านเห็นว่า เป็นข้อที่ตรงกับความคิดเห็นของท่านมากที่สุด ไม่มีคำตอบที่ถูกหรือผิด

1 หมายถึงว่า ไม่เห็นด้วยอย่างยิ่ง
2 หมายถึงว่า ไม่เห็นด้วย
3 หมายถึงว่า ค่อนข้างจะไม่เห็นด้วย
4 หมายถึงว่า เฉยๆ
5 หมายถึงว่า ค่อนข้างเห็นด้วย
6 หมายถึงว่า เห็นด้วย
7 หมายถึงว่า เห็นด้วยอย่างยิ่ง

1. ฉันมีคนที่ฉันรู้สึกใกล้ชิดสนิดสนม ซึ่งทำให้ฉันรู้สึกอบอุ่น

1 2 3 4 5 6 7
ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

2. ฉันมีกลุ่มเพื่อนหรือเพื่อนบ้าน ซึ่งทำให้ฉันรู้สึกว่าฉันมีความสำคัญในกลุ่ม

1 2 3 4 5 6 7
ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

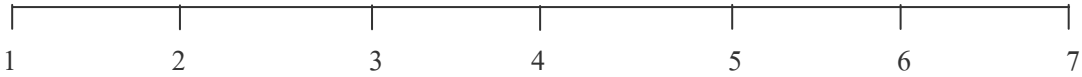
3. คนรอบข้างฉันหรือเพื่อนร่วมงาน บอกหรือแสดงให้ฉันรู้ว่า ฉันทำงานได้(งานบ้าน หรือ ที่ทำงาน)

1 2 3 4 5 6 7
ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

4. ฉันรู้สึกว่าฉันเป็นคนมีค่าสำหรับญาติ และ/ หรือ

1 2 3 4 5 6 7
ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

5. ฉันใช้เวลาพูดคุย หรือทำกิจกรรมร่วมกับคนที่มีความสนใจในเรื่องคล้ายๆกัน

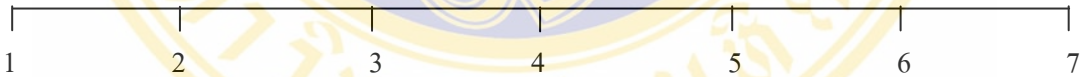


6. คนรอบข้างหรือเพื่อนๆ แสดงให้ฉันรู้ว่าเขาชอบที่ได้ทำงานร่วมกับฉัน

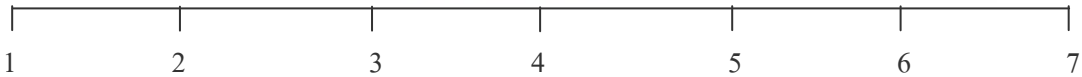
7. ถ้าฉันต้องการความช่วยเหลือที่ต้องใช้เวลานานพอสมควร มีคนพร้อมที่จะช่วยเหลือฉัน

8. ฉันและเพื่อนจะช่วยเหลือซึ่งกันและ

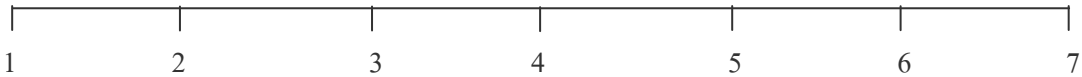
9. ฉันได้มีส่วนช่วยเพื่อนหรือคนรู้จัก สามารถทำงานได้ดีขึ้น



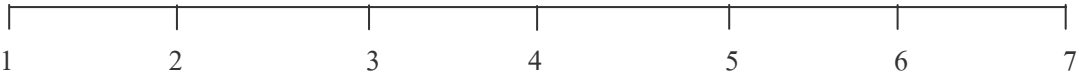
10. ครอบครัวของฉันได้แสดงให้ฉันทราบว่า ฉันมีความสำคัญสำหรับเขา



11. ฉันมีญาติหรือเพื่อนที่พร้อมจะช่วยเหลือฉัน ถึงแม้ว่าฉันจะไม่ สามารถตอบแทนเขาได้



12. เมื่อฉันรู้สึกไม่สบายใจ ฉันมีคนใกล้ชิดที่เข้าใจฉันและทำให้ฉันรู้สึกเป็นตัวของตัวเอง



1 2 3 4 5 6 7

ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

13. ฉันรู้สึกว่ามีความสุขที่จะทำสิ่งเล็กๆน้อยๆ ที่ทำให้ผู้อื่นพอใจ

1 2 3 4 5 6 7

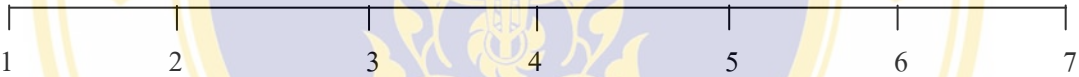
ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

14. ฉันรู้ว่ามีคนชื่นชม

1 2 3 4 5 6 7

ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

15. ฉันมีคนที่รักและห่วงใย



1 2 3 4 5 6 7

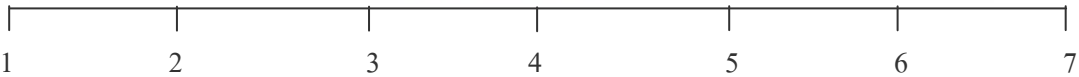
ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

16. ฉันมีเพื่อนที่จะพูดคุย เที่ยว หรือทำอะไร

1 2 3 4 5 6 7

ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

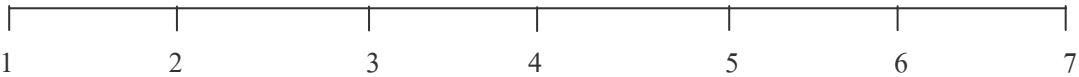
17. ฉันมีความรับผิดชอบในการช่วยเหลือ



1 2 3 4 5 6 7

ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

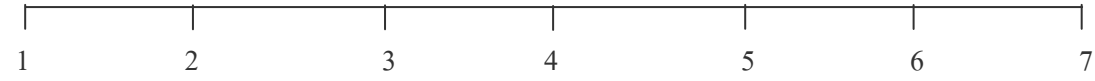
18. ถ้าฉันต้องการคำแนะนำ มีคนพร้อมที่จะช่วย



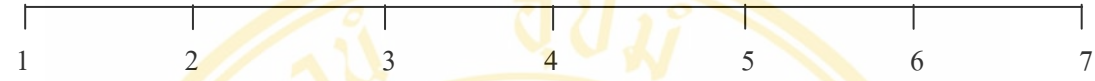
1 2 3 4 5 6 7

ไม่เห็นด้วยอย่างยิ่ง เฉยๆ เห็นด้วยอย่างยิ่ง

19. ฉันมีความรู้สึกว่าฉันเป็นที่ต้องการของเพื่อน ญาติ หรือ คน



20. ถ้าฉันป่วย มีคนที่จะให้คำแนะนำฉันในการดูแล

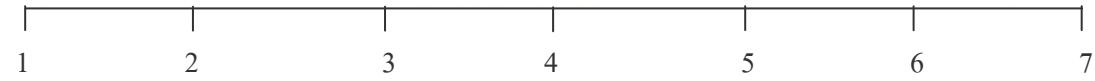


21. ฉันไม่สามารถพึ่งพาญาติ และ เพื่อน เมื่อฉันมีปัญหา

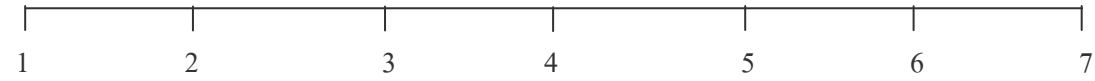
22. ฉันไม่ค่อยได้เป็นผู้ให้ หรือ ช่วยเหลือ

23. ฉันไม่รู้จะระบายความรู้สึกกับใครเมื่อฉันมีปัญหาหรือไม่สบาย

24. ฉันรู้สึกว่าไม่มีใครมีปัญหาเท่าฉัน หรือเหมือนฉัน



25. มีคนคิดว่าฉันไม่ได้เป็นเพื่อนที่ดีอย่างที่ฉันควรจะเป็น



แบบตรวจวัดหาโรคซึมเศร้าในประเทศไทย

คำชี้แจง *แบบสอบถามปัญหาสุขภาพ พัฒนาขึ้นโดยกลุ่มพัฒนาแบบสอบถาม แบบวัดด้วยตนเอง เพื่อตรวจวัดหาโรคซึมเศร้าในประชากรไทย โดยมีข้อคำถามจำนวน 20 ข้อ คะแนนรวม 60 คะแนน*

กรุณาขีด ✕ ลงบนข้อที่ตรงกับสุขภาพหรือความรู้สึกของคุณ ในช่วง2สัปดาห์นี้

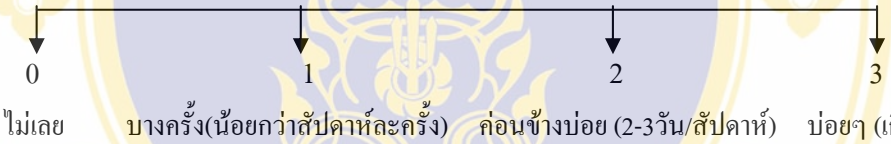
3 หมายถึงว่า บ่อยๆ= เกือบทุกวัน

2 หมายถึงว่า ค่อนข้างบ่อย= 2-3 วัน/สัปดาห์

1 หมายถึงว่า บางครั้ง (น้อยกว่าสัปดาห์ละครั้ง)

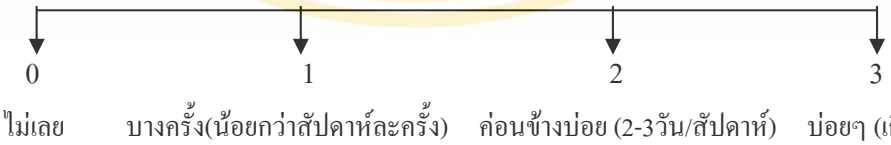
0 หมายถึงว่า ไม่เลย

1. รู้สึกเบื่ออาหาร

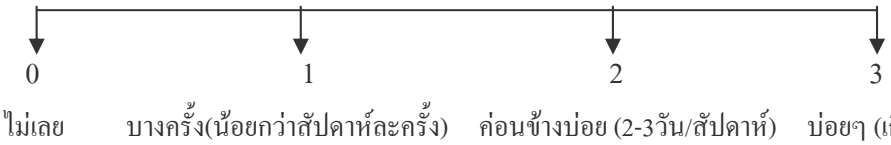


2. นอนไม่หลับหรือต้องใช้ยาช่วยให้หลับ

3. รู้สึกอ่อนเพลีย เหนื่อยง่าย



4. **คิดมาก กังวล**



3. รู้สึกสบายใจ

ไม่เลย บางครั้ง(น้อยกว่าสัปดาห์ละครั้ง) ค่อนข้างบ่อย (2-3วัน/สัปดาห์) บ่อยๆ (เกือบทุกวัน)

4. รู้สึกเบื่อ ไม่อยากพูดคุย

ไม่เลย บางครั้ง(น้อยกว่าสัปดาห์ละครั้ง) ค่อนข้างบ่อย (2-3วัน/สัปดาห์) บ่อยๆ (เกือบทุกวัน)

7. ใจลอย ไม่มีสมาธิ

ไม่เลย บางครั้ง(น้อยกว่าสัปดาห์ละครั้ง) ค่อนข้างบ่อย (2-3วัน/สัปดาห์) บ่อยๆ (เกือบทุกวัน)

8. อยากอยู่เฉยๆ ไม่อยากทำอะไร

ไม่เลย บางครั้ง(น้อยกว่าสัปดาห์ละครั้ง) ค่อนข้างบ่อย (2-3วัน/สัปดาห์) บ่อยๆ (เกือบทุกวัน)

9. รู้สึกเหงา หดหู่ใจ

ไม่เลย บางครั้ง(น้อยกว่าสัปดาห์ละครั้ง) ค่อนข้างบ่อย (2-3วัน/สัปดาห์) บ่อยๆ (เกือบทุกวัน)

10. ชีวิตอนาคตยังน่าอยู่ มีความหมาย

ไม่เลย บางครั้ง(น้อยกว่าสัปดาห์ละครั้ง) ค่อนข้างบ่อย (2-3วัน/สัปดาห์) บ่อยๆ (เกือบทุกวัน)

11. ร้องไห้หรืออยากร้องไห้

ไม่เลย บางครั้ง(น้อยกว่าสัปดาห์ละครั้ง) ค่อนข้างบ่อย (2-3วัน/สัปดาห์) บ่อยๆ (เกือบทุกวัน)

12 ตัดสินใจไม่ได้แม้เรื่องเล็กน้อย

13. ชีวิตไม่มีความสุข

14. รู้สึกเศร้าซึมเมื่อตื่นนอนตอนเช้า

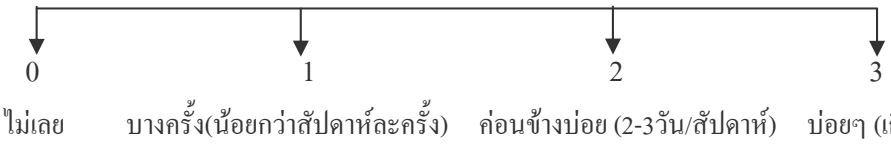
15. รู้สึกตัวเองมีคุณค่า

16. ตำหนิหรือกล่าวโทษตนเอง

17. เบื่อหน่ายเกือบทุกสิ่ง

18. คิดอยากตาย

19. คนอื่นทักว่าคุณดูเครียด ซึมหรือหมอง



20. พยายามฆ่าตัวตาย ☐ เคย ☐ ไม่เคย

☺ ขอขอบคุณในความร่วมมือของท่านเป็นอย่างสูง ☺

APPENDIX E

RESULT OF DEPRESS PARTICIPANTS

The data of mothers who had scored over 25 which are identified those having depression. The result indicated that 36 mothers are having depression. The author checked for normal distribution for the data of depression, self-efficacy and social support again. The result showed they all normal distribution.

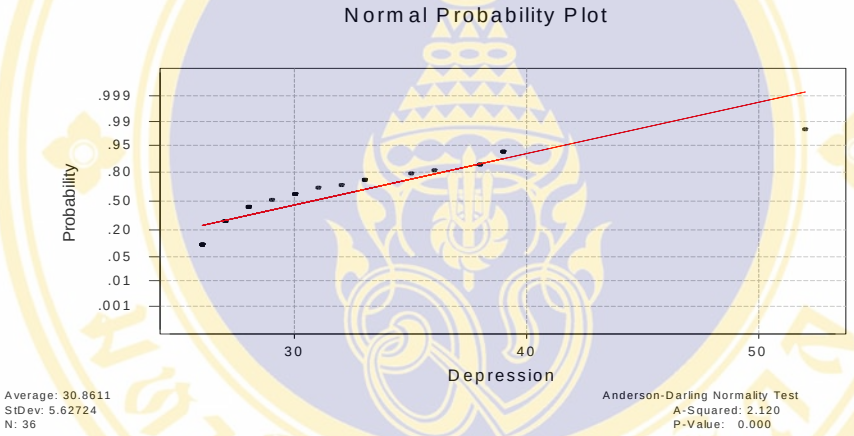


Figure 15 The distribution of depression mothers

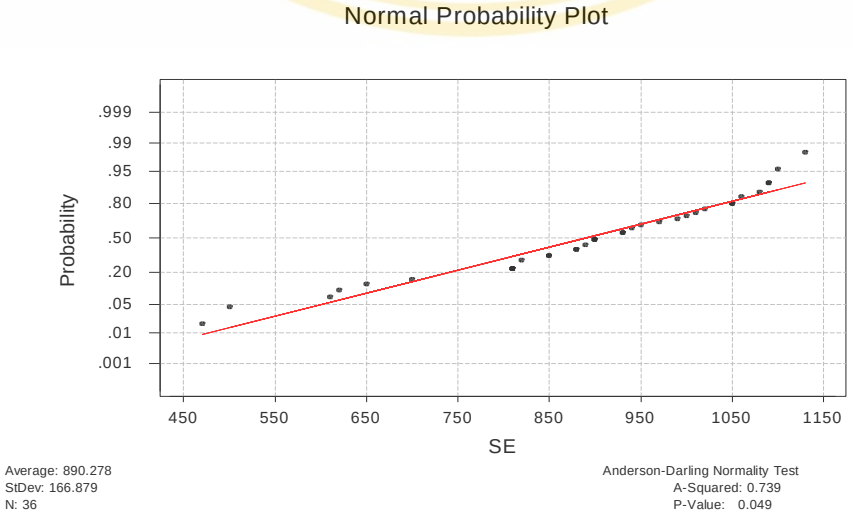


Figure 16 The distribution of maternal self-efficacy in general infant care

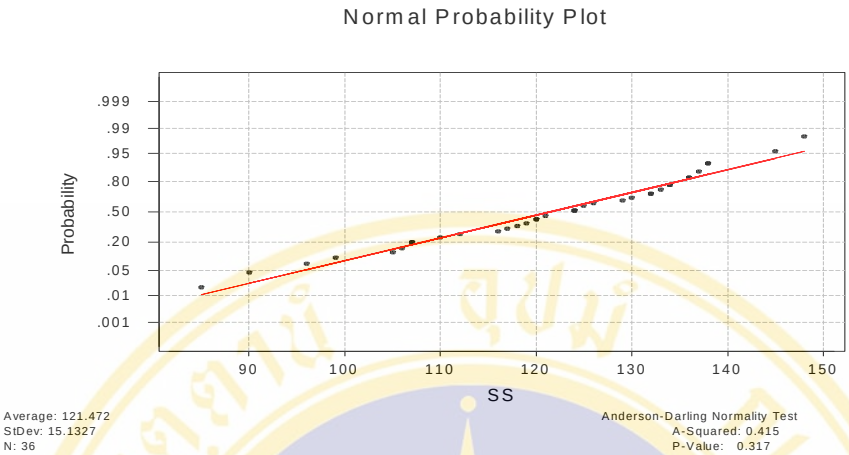


Figure 17 The distribution of social support

Descriptive analysis of self-efficacy, social support and maternal depression in depression group

Table 10 Scale used, means, standard deviations, and ranges of maternal self-efficacy, social support and maternal depression

Variables	Scale used	Mean	SD	Actual Range	Possible Range
Self-efficacy	SICS	68.23	12.84	36 - 87	0-100
Social support	PRQ	121.47	15.13	85-148	25-175
Depression	HRSR	30.86	5.62	26-52	0-60

Note. SICS=Self-efficacy in Infant care scale; PRQ= Personal Resource Questionnaire (Part II); HRSR= Health-Related Self-Report

Bivariate analyses between self-efficacy, social support, and depression

Table 11 Pearson's Correlation between age, education level, maternal self-efficacy, social support, and maternal depression

Variables	**Self-efficacy (r)**	**Social support (r)**	**Depression (r)**
Maternal Age	0.111	-0.043	0.017
Education level	-0.097	0.266	-0.051
Maternal self-efficacy			0.183
Social support	0.011		0.123

*p<.05

The result showed that there was no relationship between maternal age, education level, maternal self-efficacy, social support and maternal depression.

BIOGRAPHY

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