

**PERSONAL FACTORS, MATERNAL ROLE ADAPTATION
AND POSTPARTUM DEPRESSION IN PRIMIPAROUS
ADOLESCENT MOTHERS**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF NURSING SCIENCE
(MATERNITY AND NEWBORN NURSING)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
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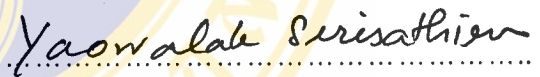
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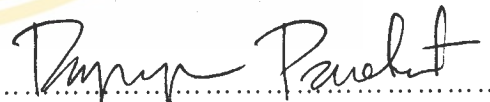
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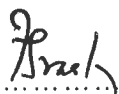
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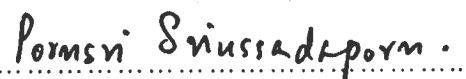
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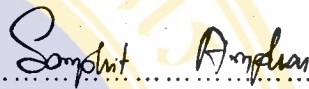


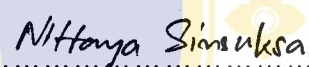
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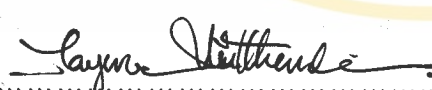
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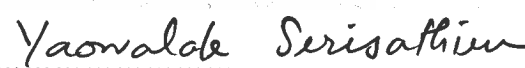

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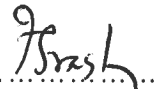

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Somphit Amphai

PERSONAL FACTORS, MATERNAL ROLE ADAPTATION AND POSTPARTUM DEPRESSION IN PRIMIPAROUS ADOLESCENT MOTHERS

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THESIS ADVISOR: KOBKUL PHANCHAROENWORAKUL, Ph.D.,
YAOWALAK SERISATHIEN, D.N.S., RUNGNAPA PANITRAT, Ph.D.**ABSTRACT**

The purpose of this descriptive research was to describe maternal role adaptation and postpartum depression and to examine whether family income, readiness to have a child, type of family and maternal role adaptation can predict postpartum depression in primiparous adolescent mothers. The study sample consisted of 100 primiparous adolescent mothers who were attending the family planning unit for 4-6 weeks postpartum at Maharaj Nakorn Chiang Mai Hospital, Nakhon Phanom Hospital, and Mother and Child Hospital, Health Promotion Center Region 10 during May to August, 2005. Data were collected by three self-administered questionnaires, i. e., the Demographic data questionnaire, Maternal role adaptation questionnaire, and the Center for Epidemiologic Studies-Depression (CES-D) Scale. Stepwise multiple regression was used for data analysis.

The results revealed that 26 percent of primiparous adolescent mothers experienced postpartum depression. Most adolescent mothers had a high score on maternal role adaptation, both in total and each aspect. Maternal role adaptation could predict postpartum depression in primiparous adolescent mothers at 15.3 percent ($p < .001$).

The results of this study indicate that primiparous adolescent mothers are at risk for postpartum depression, especially the mothers who had ineffective maternal role adaptation. Nurses should assess risk factors of postpartum depression. Enhancing the maternal role adaptation in primiparous adolescent mothers can help decrease maternal depression during postpartum period.

**KEY WORDS: POSTPARTUM DEPRESSION / MATERNAL ROLE
ADAPTATION / ADOLESCENT MOTHERS**

92 pp.

ปัจจัยส่วนบุคคล การปรับตัวต่อบทบาทการเป็นมารดา และภาวะซึมเศร้าระยะหลังคลอดในมารดาวัยรุ่นที่คลอดบุตรคนแรก (PERSONAL FACTORS, MATERNAL ROLE ADAPTATION AND POSTPARTUM DEPRESSION IN PRIMIPAROUS ADOLESCENT MOTHERS)

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บทคัดย่อ

การวิจัยเชิงบรรยายครั้งนี้มีวัตถุประสงค์ เพื่อศึกษาการปรับตัวต่อบทบาทการเป็นมารดา และภาวะซึมเศร้าระยะหลังคลอด และศึกษาอำนาจในการทำนายของรายได้ของครอบครัว ความพร้อมในการมีบุตร ลักษณะครอบครัว และการปรับตัวต่อบทบาทการเป็นมารดา ต่อภาวะซึมเศร้าระยะหลังคลอดในมารดาวัยรุ่นที่คลอดบุตรคนแรก กลุ่มตัวอย่างเป็นมารดาวัยรุ่นที่คลอดบุตรคนแรกที่มาใช้บริการตรวจสุขภาพระยะหลังคลอด 4-6 สัปดาห์ ที่หน่วยวางแผนครอบครัว โรงพยาบาลมหาราชนครเชียงใหม่ โรงพยาบาลนครพิงค์ และโรงพยาบาลแม่และเด็ก ศูนย์ส่งเสริมสุขภาพเขต 10 จังหวัดเชียงใหม่ ระหว่าง เดือนพฤษภาคม ถึง เดือนสิงหาคม 2548 จำนวน 100 ราย เก็บข้อมูลโดยใช้แบบสอบถามจำนวน 3 ชุด ประกอบด้วย แบบสอบถามปัจจัยส่วนบุคคล แบบสอบถามการปรับตัวต่อบทบาทการเป็นมารดา และ แบบวัดภาวะซึมเศร้า วิเคราะห์ข้อมูลโดยใช้ การวิเคราะห์ถดถอยพหุแบบขั้นตอน

ผลการศึกษาพบว่า ร้อยละ 26 ของกลุ่มตัวอย่างมีภาวะซึมเศร้าระยะหลังคลอด กลุ่มตัวอย่างส่วนใหญ่มีคะแนนการปรับตัวต่อบทบาทการเป็นมารดาในระดับสูงทั้งโดยรวมและรายด้าน การปรับตัวต่อบทบาทการเป็นมารดา สามารถทำนายภาวะซึมเศร้าระยะหลังคลอดได้ร้อยละ 15.3 ($p < .001$)

ผลการศึกษาแสดงให้เห็นว่า มารดาวัยรุ่นที่คลอดบุตรคนแรกมีภาวะเสี่ยงต่อการเกิดภาวะซึมเศร้าระยะหลังคลอด โดยเฉพาะมารดาที่มีการปรับตัวต่อบทบาทการเป็นมารดาอย่างไม่มีประสิทธิภาพ พยาบาลควรประเมินปัจจัยเสี่ยงของการเกิดภาวะซึมเศร้าระยะหลังคลอดในมารดาวัยรุ่นที่คลอดบุตรคนแรก ส่งเสริมให้มารดาวัยรุ่นที่คลอดบุตรคนแรกสามารถปรับตัวต่อบทบาทการเป็นมารดาได้ เพื่อช่วยลดโอกาสเสี่ยงของการเกิดภาวะซึมเศร้าระยะหลังคลอด

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CHAPTER I

INTRODUCTION

Background and Significance of the Study

Adolescence is the period of an individual's transformation from a child to an adult. The developmental tasks of adolescent must be accomplished before the child becomes a mature adult. Pregnancy and parenthood in adolescent interrupt the development on identity formation and developmental tasks (Johnson, 1993). Furthermore, the adolescent years are marked by many psychosocial changes when these changes are complicated by pregnancy and parenthood, the results can be overwhelming for young women. (Hudson, Elek & Campbell-Grossman, 2000) In Thailand, the rate of mothers who are adolescents has been increasing. Live-birth rate in the mother at the age between 15 and 19 years in 2000, 2001, and 2002 were 11.2 %, 11.7 %, and 12.0 %, respectively (National Statistic Office Ministry of Information and Communication Technology, 2004). Although, The National Health Development plan under the 8th National Economic and Social Development Plan (1997-2001) proposed that the live-birth rate should not exceed 10 % in the mothers whose age are lower than twenty years (Committee on The National Development Health Plan under the 8th National Economic and Social Development Plan (1997-2001), 1996).

When an adolescent becomes a mother, especially for the first time mother, she could face with several developmental tasks at the same time. These tasks include the developmental tasks of adolescent, wife, and motherhood. The transition to be a mother could be difficult for adolescent mothers. Coping with the developmental tasks of a mother often is complicated by the unmet developmental needs and tasks of adolescent. Trying to accomplish the developmental tasks of motherhood and the developmental tasks of normal adolescence, at the same time, is quite overwhelming for adolescents. These new mothers may experience difficulty in accepting changing self-image and adjusting to new roles relating to the responsibilities of infant care. They may feel “different” from their peer group, feel excluded from “fun” activities,

and forced prematurely to assume an adult social role. The conflicts between their own desires and the demands of the infant needs, and the low tolerance frustration typical to adolescence further contributes to the normal psychosocial stress of childbirth. The psychological burdens may lead to depression and to postponement in attaining an adult identity (Johnson, 1993)

Depression is the most common affective disorder occurring in postpartum women (Green & Wilkinson, 2004). Postpartum depression is a mental disorder that the depressive episode may be minor or major without psychotic features (Limandri, 1995; Phillips, 1996; Reeve, 1993). The major components of depressive symptoms included depressed affect, positive affect, somatic and retarded activity, and interpersonal relationship (Radloff, 1997).

Although maternal age has not been clearly associated with postpartum depression, several studies in western countries indicate that adolescent mothers experience high rates of postpartum depression. Cassidy, Zoccolillo, and Hughes (1996) reported that 24% of adolescent mothers indicated clinically significant level of depression. Hudson, Elek, & Campbell-Grossman (2000) found that 53% of adolescent mothers experience depressive symptoms postpartum. Black, Papas, Hussey, Hunter, Dubowitz, Kotch, et al. (2002), of 194 adolescent mothers, found that 32% of adolescent mothers reported depressive symptoms above the clinical cut-off. In Thailand, Niratttharadorn (2005) studied self-esteem, social support, and depression in Thai adolescent mothers. She found that 54.71% of adolescent mothers experience depressive symptoms during their postpartum period.

Postpartum depression can have numerous devastating effects on mother, her new born, and her family (Amankwaa, 2003). If the depressed mothers have not been diagnosed and treated, the depressive symptoms could be severe and developed to postpartum psychosis. Postpartum depression often goes unrecognized by family and health care professional. Undiagnosed postpartum depression can result in the form of maternal suicide or infanticide (Beck & Gable, 2000). The depressed mothers may have flat affect or depressed mood. They may demonstrate less vocal and less responsive to their infants. These may affect their infants' language development, problem-solving ability, mastery motivation, and social competence (Field, Pickens, Prodromidis, Malphurs, Fax, Bendell, et al., 2000) and maternal-infant interaction

(Clemmens, 2002). Moreover, the depressed mother may decrease her interactions with the husband and family members. Communication could be impaired because she gradually withdraws from contact with others. The decreased libido commonly associated with depression that may also affect the spouse relationship (Murry, Mckinney, & Gorrie, 2002).

Black, Papas, Hussey, Hunter, Dubowitz, Kotch, et al. (2002) found that 39% of the children had been reported for maltreatment. Moreover the children who had a mother with depressive symptoms had more internalizing and externalizing behavior problems than those whose mothers had no symptom of depression. The finding was similar to the study of Beck(1999)'s meta-analysis of 33 studies, which revealed that children between the age of 1 and 18 years of depressed mothers were not only at risk for the development of psychopathology, but also for behavior problems than children whose mothers were not depressed. Field, et al (2000) studied 160 depressed mothers and found that the mothers with depressive symptoms continued to had symptoms over the first 6 months after giving birth. Their infants showed the growth or developmental delays compared with those whose mothers were not depressed. Husbands of women with depressive symptoms displayed more psychological problems and greater marital dissatisfaction than those whose wives had no postpartum depression (Beck and gable, 2000).

The exact pathogenesis of postpartum depression is unknown. The cause of postpartum depression may be biologic, psychologic, or situational (Lowdermilk, 2003). The review of the literatures in Thailand revealed that risk factors of postpartum depression included family income, readiness to have a child, type of family, and maternal role adaptation (Gerdprasert, 1999; Phadungyotee, 2002; Suppaudom, Serisathien, Ujarattana, and Boonchom, 1999; Wongvisetsirikul, 1997) have been found to be associated with postpartum depression. However, most of the studies on the relationship between risk factors and maternal depression have focused on adult mothers. Little is known about the issue of postpartum depression among Thai adolescent mothers. Two studies among Thai adolescent mothers, Srisaeng (2003) studied the relationship between self-esteem, stressful life events, social support and depression, she found the moderating effecting of social support on the relationship between self-esteem and postpartum depression but it was not significant

and Nirattharadorn (2005) studied the relationship between self-esteem, social support and depression, she found that antepartum depression had significantly positive direct influence on postpartum depression ($\beta = .73, p < .001$), and adolescent mothers with antepartum depression, low levels of self-esteem, and low social support demonstrated more experience with postpartum depression. Therefore, the study on the relationship among these factors and postpartum depression in Thai adolescent mothers is still an interesting issue to future examine, the findings will contribute to a more conclusive knowledge among Thai adolescent mothers. Since the postpartum depression can have numerous devastating effects on the mothers, her newborn, and her family which may cause family, social, and national problems in the future; the study on the relationship among risk factors and postpartum depression in primiparous adolescent mothers can be useful to guide the nurses who provide care for adolescent mothers.

Research Questions

1. What are the explanation of maternal role adaptation and postpartum depression in primiparous adolescent mothers?
2. Can family income, readiness to have a child, type of family and maternal role adaptation predict postpartum depression in primiparous adolescent mothers?

Purposes of the Study

1. To describe the maternal role adaptation and postpartum depression in primiparous adolescent mothers.
2. To examine whether family income, readiness to have a child, type of family, and maternal role adaptation can predict postpartum depression in primiparous adolescent mothers.

Research Hypotheses

Family income, readiness to have a child, type of family, and maternal role adaptation can predict postpartum depression in primiparous adolescent mothers.

Conceptual Framework

Conceptual framework in this study based on Roy adaptation model (Roy & Andrew, 1999). Roy believed that humans are holistic adaptive systems, in which they adjust effectively to changes in the environment and, in turn, affect the environment. Human and the earth have common patterns and mutuality of relations and meaning, which systems can be view as experiencing inputs, output, and control and feedback processes.

Stimuli serve as input to human adaptive system and control mechanisms of the human system are coping process. The major processes for coping are the regulator and the cognator subsystems. The behaviors that result from the control processes can be observed in four adaptive modes; the physiologic-physical, self-concept-group identity, role function, and interdependence modes. The processing of this input through control processes results in behavioral responses (Roy & Andrew, 1999), which are adaptive and ineffective responses, these as the outputs for feedback or as the inputs return to the human adaptive system.

Self-consistency is the part in the self-concept-group identity mode. Roy (1999) viewed that it is the part of the personal self component which strives to maintain a consistent self-organization and to avoid disequilibrium; an organized system of ideas about self. Behavior related to self-consistency can be observed in a person's response to a situation and in verbal statements. Inconsistency in self-organization results in discomfort and disturbance. The individual uses cognitive processes to reduce tension and to maintain a consistent self. The transition to motherhood is frequently described as a time of disorder and disequilibrium for mothers (Edwards, 2000), then the postpartum depression occurrence may be because mothers can not to maintain a consistent self-organization and to avoid disequilibrium; which results in discomfort and disturbance, re expressed in depressive symptoms.

From the literature review it was revealed that several factors could affect postpartum depression. However, the researcher presented the risk factors which particularly selected and included in this study as the following.

Family income: A mother who is able to provide infant care feels a sense of efficacy or competence (Secco & Moffatt, 2003). Because of inability to pay for infant supplies or child care, chaotic home situations, and worry over eligibility for social

and health care services may deplete these women's psychological energy (Edwards, 2000). Lack of money for basic needs was associated with postnatal depressive symptoms (Seguin, Potvin, St-Denis, & Loiselle, 1999). Then insufficient family income may cause the mother to experience depression.

Readiness to have a child: The mothers who are readiness to have a child may have providing them with the necessary skill and knowledge to becoming a mother. These help mothers cope with this new situation, to support them during these first difficult days and to ensure they feel confident in handing their baby (Wieggers, 2006). In contrast, the mothers who are not readiness to having a child have not the providing for becoming a mother. It can affect the adolescent mother's ability to care for her baby and, in particular, to deal with negative baby responses to her care such as crying and fussing that can contribute to depressive symptoms (Secco, Profit, Kennedy, Walsh, Letourneau, & Stewart, 2007). Tomlinson, Swartz, Cooper, & Molteno (2004) found that the infant being unplanned and the infant being unwanted could significantly predicted maternal depression with OR= 3.14, 95% CI (1.53, 6.45) and (OR= 3.59, 95% CI (1.74, 7.41), respectively.

Type of family: Family is the supporting resource which consists of instrumental supports and emotional supports which could enhance self-confidence or self-esteem. Lack of a confidante, living alone or in a house shared with people other than a partner and lack of perceived support from members of the women's primary group have been associated with increased postnatal depressive symptoms (National Health and Medical research Council, 2000). If the mothers receive good support from the family it can decrease risk of postpartum depression in primiparous adolescent mothers. Heh, Coombes, & Bartlett (2004) found that mothers were less depressed when they stayed in their parent's home and had their own mothers take care of them.

Maternal role adaptation: Childbirth is a major life transition and an accumulation of stress at this time may place women at greater risk of developing depressive symptoms (National Health and Medical research Council, 2000). Becoming a mother involves transition, learning, new behaviors, new responsibilities, and emotional challenges (Mercer, 2004). The adolescent mothers may feel overwhelmed by the reality of her infant and the physical discomfort of the puerperium (Luxner, 2005). In primiparous, this may be related to increased maternal

anxiety with the first child and difficulty adjusting to parenting, as well as problems with unfulfilled expectations or limited coping strategies (National Health and Medical research Council, 2000). These results supported to development of depressive symptoms in adolescent mothers.

The conceptual framework demonstrates the relationships among the study variables is shown in Figure 1 and Figure 2 below.



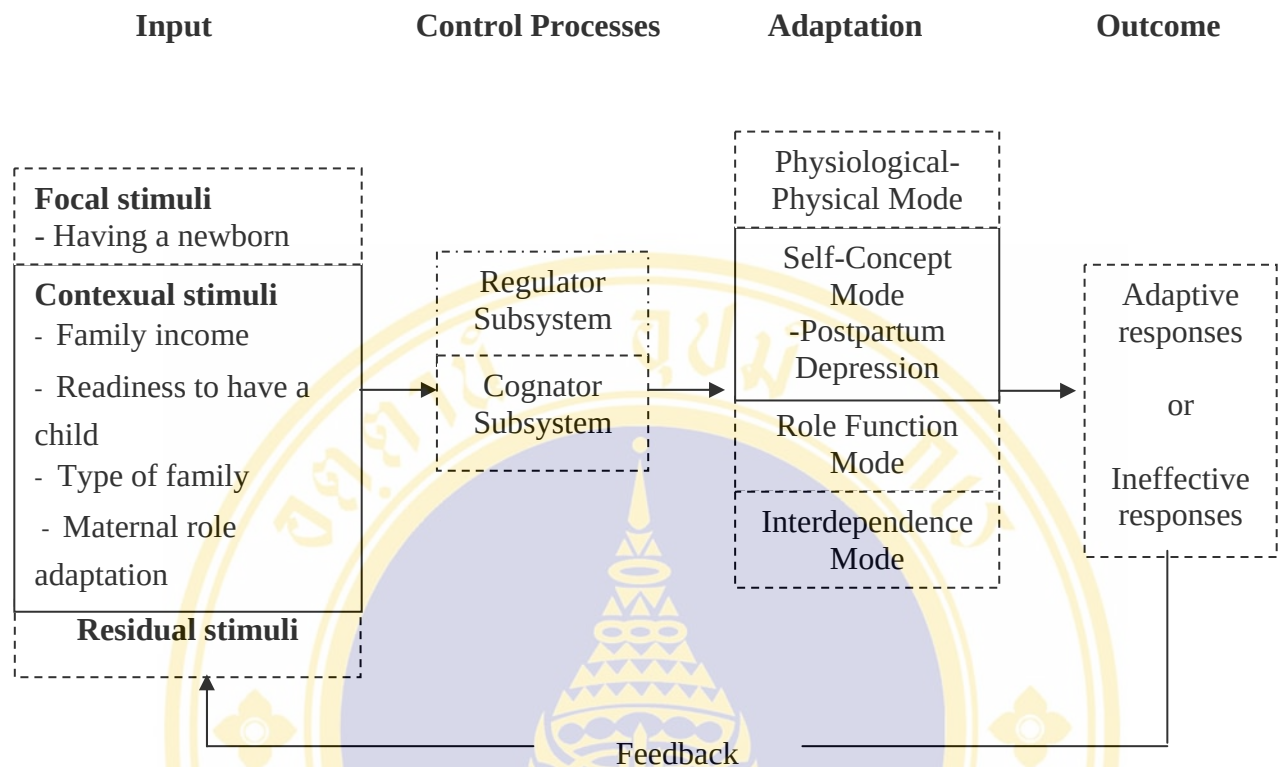


Figure 1 Conceptual Framework of the Study

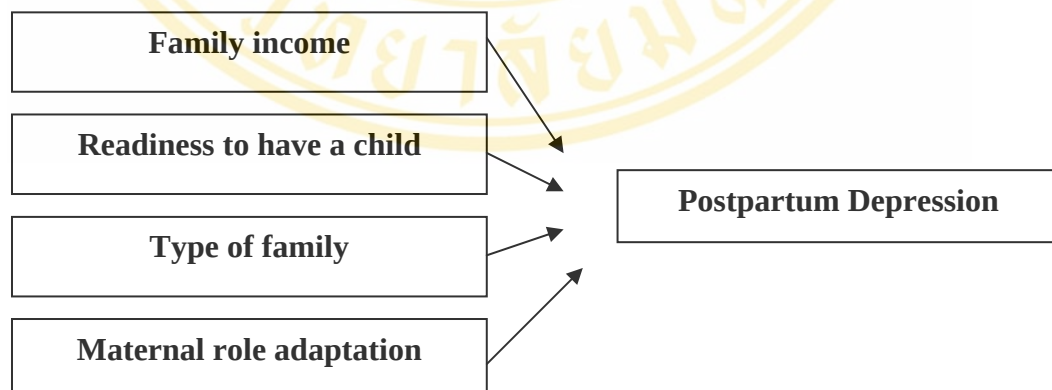


Figure 2 The Relationship among the Study Variables

Scope of the Study

The purposes of this descriptive study aim to explore the maternal role adaptation and postpartum depression in the primiparous adolescent mothers, and to examine the predictability of family income, readiness to have a child, type of family, and maternal role adaptation on postpartum depression in primiparous adolescent mothers. The samples consisted 100 primiparous adolescent mothers who came to follow up during 4-6 weeks postpartum at the family planning units at Maharaj Nakorn Chiangmai Hospital, Nakornping Hospital, and Mother and Child Hospital, Health Promotion Center Region 10 during May to August 2005.

Definition of Terms

Family income refers to the amount of revenue of the primiparous adolescent mother and her husband or only one of the two if another does not have revenue. Data on family income will be divided collected in Thai Bahts per month.

Readiness to have a child refers to the evaluation by the adolescent mother herself that she is ready for taking care of her child. It is divided into two categories: ready and not ready.

Type of family refers to the relationship and numbers of people who live under the same roof and related with the primiparous adolescent mother. It will be divided into nuclear family and extended family.

Nuclear family includes the primiparous adolescent mother, her husband, and the newborn.

Extended family includes the primiparous adolescent mother, her husband, newborn, and their cousins or relatives.

Maternal role adaptation refers to the behaviors, actions or feeling associated with the maternal role adaptation of the primiparous adolescent mother during postpartum period. This can be measured by the maternal role adaptation questionnaire, developed based on Roy adaptation model (Roy & Andrew, 1999) and the maternal task and responsibility concept (Jensen & Bobak, 1993). The scores ranged between 34-170. A high score indicates high level of maternal role adaptation.

Postpartum depression refers to the feelings involving depressed affect, positive affect, somatic and retarded activity, and interpersonal relationship that

primiparous adolescent mother score as how often she experiences these feelings during the past week including that day. It can be measured by the Center for Epidemiologic Studies-Depression (CES-D) Scale (Radloff, 1977), which was translated to Thai language by Vorapongsathorn, Pundii, and Triamchaisri (1990). The scores ranged between 0 and 60. A score of 19 or more indicates risk of maternal depression (Kuptiniratsaikul and Pekuman, 1997).

Expected Outcomes and Benefits

The results of this study can be used for future applications as the following.

1. A guideline for nurses and health care teams in screening for postpartum depression and planning of nursing care for primiparous adolescent mothers.
2. The information used to develop an intervention to prevent and manage postpartum depression in primiparous adolescent mothers.
3. The supportive data and a guideline to teach nursing student.
4. The data for further research in other issues of the postpartum depression in adolescent mothers or in other populations.

CHAPTER II

LITERATURE REVIEW

This study was to describe maternal role adaptation and postpartum depression and to examine whether family income, ready to having a child, type of family, and maternal role adaptation can predict postpartum depression in primiparous adolescent mothers. The study was undertaken by reviewing the relevant literature on postpartum depression, postpartum depression in primiparous adolescent mothers, and variables related to postpartum depression including family income, ready to having a child, type of family, and maternal role adaptation.

Postpartum Depression

Depression is the most common affection disorder occurring in postpartum period women (Green and Wilkinson, 2004). The term depression comes from the Latin deprivere, which means “to press down” (Cheuhirun, 1983). The common emotional change will be follow to live situations which is the intermediate level and the functioning of the woman is usually not impaired. Mood disorders are depressed episode or manic episode, consider to the severity and duration of symptoms, which exert effect on abnormal verbal, thinking, physical, and behavior such as poor interpersonal relationship (Kasantikul, 2002). According to American Psychiatric Association (2000), mood disorders are the predominant mental health disorder in the postpartum period (Fishel, 2004). The mood disorders of postpartum period can be grouped into three categories from less severe to most severe: postpartum blues, postpartum depression, and postpartum psychosis (Limandri, 1995; Fishel, 2000).

1. Postpartum blues were mild depression, also known as maternity blues or baby blues. The postpartum blues consist of a transient period of depression that often occurs during the first few days of the puerperium (Murry, McKinney, and Gorrie, 2002; London, Ladewig, Ball, and Bindler, 2003), or begin on the third day after childbirth, last 1 day to 2 weeks, and then disappear without treatment (Phillips, 1996). Approximately 50 % to 80 % of women experience the postpartum blues (Clark, 2000;

Phillips, 1996; Jones & Venis, 2001; and Edwards, 2004). Common symptoms, which include crying spells, sadness, confusion, insomnia, fatigue, anorexia, mood instability, and anxiety (Limandri, 1995; Jones and Venis, 2001; Murry, McKinney, and Gorrie, 2002; London, Ladewig, Ball, and Bindler, 2003). Predisposing factors of postpartum blues may include biologic changes, stress, normal responses, or social or environmental cause (Reeve, 1993). The postpartum blues usually resolve naturally, but if persistent or worsening symptoms develop, the women may need evaluation for postpartum depression (London, Ladewig, Ball, and Bindler, 2003).

2. Postpartum depression (PPD) was lie between postpartum blues and postpartum psychosis in severity. Occurring in approximately 10 % to 15 % of new mother (Fishel, 2004; Green and Wilkinson, 2004). PPD is an intense and pervasive sadness with severe and labile mood swings and is more serious and persistent than postpartum blues (Fishel, 2004). This is a form of clinical depression that is not psychotic (Phillips, 1996). The depression episode may be minor or major without psychotic features (Reeve, 1993; Limandri, 1995). Predisposing factors may be hormone-related, stress-related, or infant- related (Reeve, 1993).

3. Postpartum psychosis was the most severe depression. Symptoms often begin as postpartum blues or postpartum depression (Reeve, 1993). Postpartum psychosis occurs in approximately 1 to 2 women per 1000 births and may occur more often in primiparas (Fishel, 2004; Clark, 2001; Phillips, 1996; Jones and Venis, 2001). The disorder may become apparent 2 to 3 weeks after the birth to as long as 6 to 12 months (Phillips, 1996). The signs and symptoms of postpartum psychosis are sleep disturbances, confusion, agitation, irritability, racing thoughts, rapid speech, hallucinations, delusion, paranoia, and thoughts about suicide or infanticide (Driscoll, 1996; Clark, 2001)

Of all the postpartum mood disorders, postpartum depression is probably the most commonly known (Jones and Venis, 2001). The frequency of postpartum depression varies from 5% to more than 25% of women giving birth (Reeve, 1993). Postpartum depression usually starts in the first 4 weeks after childbirth and may last for several months or more, especially if untreated (Murry, McKinney, and Gorrie, 2002). It is estimated that 400,000 mothers in the United States experience this

postpartum mood disorder each year, most often 6 to 8 weeks after delivery (Beck and Gable, 2000)

Leung, Martinson, and Arthur (2005) found that 19.8% of 269 postnatal Hong Kong Chinese women were depressed at 6 weeks postpartum. In Thailand, Phadungyotee (2002) revealed that the incidence of postpartum depression was 25% of 200 subjects were 4-6 weeks postpartum mothers. Gerdprasert (1999) found that 15% of 160 mothers were depressed at 6 weeks postpartum. Suppaudom, Serisathien, Ujarattana, and Boonchom (1999) found that 36.3% of 91 mothers were depressed at 6 weeks postpartum.

Postpartum depression has been defined as an intense and pervasive sadness with severe and labile mood swings and is more serious and persistent than postpartum blues (Fishel, 2000). Postnatal depression, although sometimes difficult to define and recognize, was described in a classic study by Pitt in 1968 as: What lies between the extreme of severe puerperal depression, with the risk of suicide and infanticide, and the trivial weepiness of “the blues”; something occurring frequently, much less dramatic than the former, yet decidedly more disabling than the latter (Bick, MacArthur, Knowles, and Winter, 2002) and Radloff (1977) defines depression as feelings involving depressed affect, positive affect, somatic and retarded activity, and interpersonal relationship.

Pathogenesis

The exact pathogenesis of postpartum depression is unknown. It generally is believed that postpartum depression is related to the hormonal and physiologic changes that occur after delivery (Chaudron, 2003). The other researchers are believed that postpartum depression related to the combination of biologic, psychologic and social factors which called Biopsychosocial factors. Each factor is affected to person in differential and as chain influence which not clear unknown to the early variation of each factor (Kasantikul, 2002). A multidisciplinary approach is needed to understand the causes of postpartum depression (Fishel, 2000) hence, several theories are occurred for explain to etiology of postpartum depression.

Biologic Theory

Some factors unique to the reproductive process play a major role. Alterations in hypothalamic-pituitary-adrenal (HPA) axis function attributable to childbearing show remarkable similarity to those observed in depressed women. Postpartum women are also at increased risk for hypothalamic-pituitary-thyroidal (HPT) axis dysfunction that may increase affective-disorder vulnerability (Fishel, 2000). Affective disorders are thought to result from a lack or excess of one or more neurotransmitters or by an imbalance of catecholamines and indolamine (Pearson, 1995) or lower than normal release of norepinephrine, serotonin, and dopamine (Kakay, 1999; Reungtrakul, 2000; Kasantikul, 2002).

Psychoanalytic Theory

This theory has postulated that a dysfunctional or flawed mother-child relationship puts an individual at risk for depression. As the infant's needs are unfulfilled, the unsatisfied libidinal strivings translate into a loss. The other explanations of depressions are included oral stage fixation, loss of self-esteem, helplessness, and anger turned inward (Pearson, 1995). The life problems are related to loss of warm, loss of parent or closed person relationships, and have loss or leave experiences such as the parent death when they were be child, child abuse or neglected child, which those are risk factor for depression (Reungtrakul, 2000; Kasantikul, 2002). Incompleted of Ego lead to dependent personalty, low self-esteem, strong superego and blame or dissatisfies themselves which Zigmond Fried (1917) explained that the anger is a part of ambivalence for a loss of key persons that lead to guilt and angry, feedback to themselves and affect to depression and loss of self-esteem (Kasantikul, 2002).

Sociocultural Theory

Theories about contributing caused of postpartum depression include stress, labeling, and feminist models and low levels of self-reported social gratification, support, and control at work and in the parenting role were related to postpartum depression (Fishel, 2000). The family discord, poverty, a broken home, life problems, failure, and hopeless have been related to loss self-esteem (Kasantikul, 2002).

Cognitive Theory

This theory process that depression occurs as a result of impaired cognition (Pearson, 1995). The cognitive triad of depression include negative views of self, the world, and the future, which accounts for an individual's affective, behavioral, and motivational symptoms of depression (Kasantikul, 2002; Pearson, 1995).

Behavioral Theory

Depression results from an interactional problem in the environment, generally one of positive reinforcement. Passivity withdrawal, and depression result when the environment is perceived negatively. Social skill deficits, impaired family interactions, and deficient processes of self-regulation have been postulated by behaviorists as behavioral explanation for depression (Pearson, 1995). The depression is maladaptive response because of learned helplessness (Kasantikul, 2002)

However, the postpartum depression may be related to many factor associated such as biologic aspect; hormones and neurotransmitters imbalance, psychoanalysis aspect, and low self-esteem, sociocultural aspect; stress, environment related problem, family problems and lack of social support, cognitive aspect; a result of impaired cognition which related to negative views of self the world and the future, behavioral aspect; the environment is perceived negatively and maladaptive response.

Signs and Symptoms of Postpartum Depression

Symptoms of postpartum depression may include the full range of emotional, cognitive, and neurovegetative symptoms of depression as follow: depressed or sad mood, anhedonia, irritability, anxiety, insomnia, difficulty concentrating, complaints of poor memory, crying, poor appetite, feeling overwhelmed, feeling hopeless or worthless, thoughts of death (own or child), suicidal ideation (Chaudron, 2003).

Beck (1992)' s a phenomenological studied, found that the significant statements for postpartum depression were extracted and clustered into 11 themes : 1) Mothers were enveloped in unbearable loneliness due to discomfort with others and a belief that no one else understood what they were experiencing 2) Contemplating death provided a glimmer of hope to the end of their living nightmare 3) Obsessive thoughts of being a bad mother and of questioning what was happening to them consumed the mothers' waking hours 4) Haunted by the fear that any normalcy in their

lives was irretrievable, the mothers grieved for their loss of self 5) Life was empty of all previous interests and goals 6) The women carried a suffocating burden of fear and guilt over pondering harming their infants 7) Shrouded in fogginess, the mothers were unable to concentrate 8) Mothers envisioned themselves as robots stripped of all positive feelings, just going through the motions 9) Uncontrollable anxiety attacks led to a feeling of being on the edge of insanity 10) Loss of control of mothers' emotions was alarming and difficult to accept 11) Besieged with insecurities the mothers needed to be mothered themselves.

Clemmens (2003) revealed that feeling depressed as an adolescent mother following the birth of a baby included several unique characteristics: feeling changed, different, and scared with the sudden realization of motherhood; feeling torn between the responsibilities of adolescence and motherhood; feeling abandoned and rejected by partners and peers; questioning and not understanding the experience of depression and what happening to they were re-grouping to see a different future.

Radloff (1997) found that the major components of depressive symptomatology included: depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance.

Assessment of Postpartum Depression

Diagnosis and categorizing postpartum depression have been difficult because of the lack of standard assessment instruments (Reeve, 1995). However, the several instruments were developed for measuring of postpartum depression as follow:

1. The Center for Epidemiologic Studies-Depression Scale (CES-D)

The questionnaire was developed by Radloff (1977) for use in studies of the epidemiology of depressive symptomatology in the general population. The CES-D scale is a short-report scale designed to measure depressive symptomatology during the past week. The questionnaire consisted of 20 items, 4 items are worded in the positive direction (item 4, 8, 12, 16) and 16 items are worded in the negative direction.

The answer of each item is organized into the following 4-point scale ranging from rarely or none of the time (less than 1 day) to most or all of the time (5-7 days), each answer is rated on a scale of 0 to 3. The possible range of scores are 0 to 60,

using a cut-off score is 16, with the higher scores indicating more symptoms, weighted by frequency of occurrence during the past week (Radloff, 1977). This instrument has been validated and it was found to have very high internal consistency and adequate test-retest repeatability, coefficient alpha was .85 which measures in the general population.

2. The Edinburgh Postnatal Depression Scale (EPDS)

The EPDS (Cox, Holden, and Sagovsk, 1987 cite in Beck and Gable, 2000) is a 10-item self-report scale, measured 10 symptoms of depression in the past week, are the following: inability to laugh, inability to look forward to things with enjoyment, unnecessary blaming of oneself, anxious or worried feeling, scared or panicky feeling, a feeling that things have been getting on top of me, difficulty sleeping because of unhappiness, sad or miserable feeling, crying, and thoughts of harming oneself.

The questionnaire use a Likert-type format for responses, each answer is rated on a scale of 0 to 3 and possible scores range from 0 to 30. Using a cut-off score of 12/13 for the EPDS. Cox and colleagues reported that sensitivity to be 86%, specificity to be 78%, positive predictive value to be 73%, and the alpha coefficient to be 0.87 with a sample of 84 postpartum women.

3. Postpartum Depression Checklist (PDC)

The PDC (Beck, 1995) is designed to be administered by the health professional to engage a woman actively in a dialogue about her experiences with the 11 symptoms of depression included on the checklist. The 11 items, lack of concentration, loss of interests, loneliness, insecurity, obsessive thinking, lack of positive emotions, loss of self, anxiety attacks, loss of control, guilt, and contemplating death, are arranged in the checklist from the most threatening item of contemplating death.

This checklist is not intended to be used to make a diagnosis of postpartum depression, it can be used to define a population that may need further evaluation. No score can be calculated from this checklist that indicates a woman needs a referral for a possible postpartum psychiatric disorder. In using the PDC, nurses should understand that women experiencing postpartum depression may find it difficult to confide their feelings to others and nurses need to dispel the popular myth that equates

becoming a mother with happiness and to give women permission to speak about any negative feelings they may be experiencing.

4. Beck Depression Inventory II (BDI-II)

The BDI-II (Beck, Steer and Brown, 1996 cite in Beck and Gable, 2001) is a recent revision of the BDI (Beck et al., 1961). This is a 21-item self-report instrument for measuring the severity of depression in adults and adolescents 13 years of age and older. Each of the 21 items is rated on a 4-point scale ranging from 0 to 3 and the maximum total score is 63. Beck and colleagues investigated the psychometric properties of the BDI-II with 500 psychiatric outpatients and 120 college students. The alpha coefficient of the BDI-II was 0.92 for the outpatients and 0.93 for the college students.

5. The Postpartum Depression Predictors Inventory (PDPI)

The PDPI (Beck, 1998) based on the meta-analysis of the postpartum depression predictors, an inventory in the form of a checklist was developed. This inventory is meant to be administered via an interview with a health care professional. The PDPI can be used during the prenatal and postpartum periods, only the first six predictors: prenatal depression, life stress, lack of social support, prenatal anxiety, marital dissatisfaction, history of previous depression, can be assessed during pregnancy and after the woman has delivered, the last two predictors: childcare stress and maternity blues, can be assessed. There is no cut-off score to be calculated checklist yields targeted risk factors for which nursing interventions can be planned to help address each woman's problems.

6. The Postpartum Depression Screening Scale (PDSS)

The PDSS (Beck and Gable, 2000) is a Likert-type self-report scale with summative scoring. This questionnaire consists of 35 items that assesses seven dimensions: sleeping/ eating disturbances, anxiety/ insecurity, emotional liability, cognitive impairment, loss of self, guilt/ shame, and contemplating harming oneself. Each dimension is composed of five items that describe how a mother may be feeling after the birth of her baby over the past 2 weeks. Women are asked to indicate their degree of disagreement or agreement with each item on a range of strongly disagree (1) to strongly agree (5). The possible range of scores is 1 to 175 with cut-off score of 80 indicating major postpartum depression. Beck and Gable (2001) found the PDSS

demonstrated higher sensitivity (91%), specificity (72%), and the alpha internal consistency reliabilities for the seven dimensions ranged from 0.83 to 0.94.

Effects of Postpartum Depression

Postpartum depression is particularly critical to treat as it has significant impact on the mother, the infant, and the family if left untreated (Alici- Evcimen and Sudak, 2003). The mother experiencing postpartum depression appears to be unhappy, irritable, and unable to cope; has negative feeling about her self and her child or children; is anxious; has a low libido; has marriage problems; experiences difficulties managing household tasks; is tearful; has physical symptoms such as sleep and appetite disturbances; and displays obsessional behavior (Hanna, Jarman, Savage, and Layton, 2004).

A recent study found that when the mother experiences postpartum depression, the husband is likely to feel fear, anger, confusion, and frustration (Troutman and Cutroma, 1990). Husbands of women with this mood disorder have displayed more psychological problems and greater marital dissatisfaction than husbands of women who do not have postpartum depression (Zelkowitz and Milet, 1996 cite in Beck and Gable, 2000).

Postpartum depression left untreated, it can be harmful to children because depressed mothers may reveal a more negative attitude towards their children are less able to engage the infant or child in a nurturing or interactive manner, and may be less able to attend to the child's physical needs (Troutman and Cutroma, 1990).

Postpartum Depression in Primiparous Adolescent Mothers

Although it unclear for the mother's age related to the postpartum depression, some study found that occurring in approximately 26 % to 32 % of adolescent mothers (Troutman and Cutroma, 1990). Which is biologically possible for the adolescent female to become a parent, her egocentricity and concrete thinking interfere with her ability to parent effectively (Edwards, 2004; Wong, Perry, & Hockenberry, 2002). The transition to parenthood may be difficult for adolescent parents. Coping with the developmental tasks of parenthood is often complicated by the unmet developmental needs and task of adolescence (Manning, 2006). Acceptance of the role of parenting, including the responsibility of newborn care and their change self-image, now sets

them apart from their peers. Often they feel excluded from desirable “fun” activities characteristic of other their age (Leifer, 2005) The conflict between their own desires and the infant ’s demands, in addition to the low tolerance for frustration that is typical of adolescence, further contributes to the normal psychosocial stress of childbirth (Manning, 2006).

In this study based on Roy adaptation model (Roy & Andrew, 1999). Roy defined adaptation as the process and outcome whereby thinking and feeling persons, as individuals or in groups, use conscious awareness and choice to create human and environmental integration. Roy believed that humans as holistic adaptive systems, which they adjust effectively to changes in the environment and, in turn, affect the environment. Human and the earth have common patterns and mutuality of relations and meaning, which systems can be viewed as experiencing inputs, output, and control and feedback processes.

Input for humans have been termed stimulus, which it is the point of interaction of the human system and environment. The Roy adaptation model describes three classes of stimuli that form the environment (Roy & Andrew, 1999) which included: 1) Focal stimulus is the internal or external stimulus most immediately, confronting the person system 2) Contextual stimuli are all other stimuli present in the situation that contribute to the effect of the focal stimulus 3) Residual stimuli are environmental factors within or without human system, the effects of which are unclear in the current situation.

Stimuli serve as input to human adaptive system and control mechanisms of the human system are coping process. The major process for coping are the regulator and the cognator subsystems, it is not possible to observe directly the functioning of these systems. Only the responses that are created can be observed. The behaviors that result from the control processes can be observed in four adaptive modes; the physiologic-physical, self-concept-group identity, role function, and interdependence modes. The processing of this input through control processes results in behavioral responses (Roy & Andrew, 1999), which are adaptive and ineffective responses, these as the outputs for feedback or as the inputs return to the human adaptive system.

In the self-concept mode, the personal perspective focuses specifically on the psychological and spiritual aspects of the human system. Self-concept is defined as the

composite of beliefs and feeling that a person holds about himself or herself at a given time, and is formed from internal perceptions of others reactions. The self-concept mode is viewed as having two components; the physical self which comprised of body sensation and body image; the personal self which comprised of self-consistency, self-ideal, and moral-ethical-spiritual self (Roy & Andrew, 1999).

Roy (1999) viewed that self-consistency is the part of the personal self component which strives to maintain a consistent self-organization and to avoid disequilibrium; an organized system of ideas about self. Behavior related to self-consistency can be observed in a person's response to a situation and in verbal statements. Inconsistency in self-organization results in discomfort and disturbance. The individual uses cognitive processes to reduce tension and to maintain a consistent self.

The personal self behaviors are the results from cognitive processes, expressed in verbalization to thoughts and feeling as well as in actions. Conversely, in terms of cognator ineffectiveness, personal self behaviors are expressed since feelings are the subjective response of the individual, there are no good, bad, right, or wrong feelings. Laughing, crying, raging, shaking, and talking are expressions of feelings. The tension of unexpressed feelings is contained within the person, it is possible to feel very angry, suppression of feelings, ties up psychic energy, and interferes with the ability to do other things.

Postpartum depression in primiparous adolescent mothers are the results of cognator ineffectiveness and inconsistency in self-organization which result in discomfort and disturbance. The primiparous adolescent mothers are expressed in verbalization to thoughts and feeling as well as in actions such as the feeling involving depressed affect, positive affect, somatic and retarded activity, and interpersonal relationship (Radloff, 1977).

Risk Factors for Postpartum Depression in Primiparous Adolescent Mothers

From the literature review there were many researchers who study the factors that might influence postpartum. However, in this study researcher focused exactly on family income, readiness to have a child, type of family, maternal role adaptation and postpartum depression.

Maternal role adaptation which represents a significant stress for many women (Cashion, 2004). Psychologically the mother may be overwhelmed by the actuality of maternal responsibilities (Bobak and Jensen, 1987). During the postpartum period, new task and responsibilities arise, and old behaviors need to be modified or new ones added in primiparous adolescent mothers. The transition to motherhood is frequently described as a time of disorder and disequilibrium for mothers (Edwards, 2000). The primiparous adolescent mothers who have good maternal role adaptation can be avoided disorder and disequilibrium, which help to maintain self-consistency. Conversely, the primiparous adolescent mothers who have poor maternal role adaptation may be conducted to disorder and disequilibrium, which lead to postpartum depression in primiparous adolescent mothers. Wongvisetsirikul (1997) revealed that the transition to motherhood was associated with postpartum depression.

Family income: The primiparous adolescent mothers have many pay out for self care and her newborn care in postpartum period while many adolescent mothers come from a socially and economically deprived group (Bobak and Jensen, 1987). Because of most of adolescent mothers had had to drop out from school when they got newborn, no occupation, or drop out from job for newborn care. Therefore, family income may be not balanced to payout and lack of the supporting resources. Inability to pay for newborn supplies or child care and chaotic home situations, deplete these adolescent mothers' psychological energy (Edwards, 2000). Which result in disequilibrium and not maintain a consistent self-organization, and lead the primiparous adolescent mothers to postpartum depression. Gerdprasert (1999) found that family income was significantly negative related to the postpartum depression and Phadungyotee (2002) revealed that family income was a predictor of postpartum depression.

Readiness to have a child: The mothers who are readiness to have a child or intention to having a child that will interest to seek the motherhood being information

such as childrearing or the advice from the mother who had had child care experience. Contrarily, the primiparous adolescent mothers who are not readiness to have a child, they have not the preparation for becoming mothers. The transition can be harder for mothers and strong emotions such as helplessness, inadequacy, and anger that arise when dealing with a crying infant catch many mothers unprepared (Edwards, 1999). At the same time, they see themselves as inept at childcare and unable to soothe their difficult infants. As time goes on, these feelings continue to worsen and expand, sending the mothers into a downward spiral of depression (Wood, Thomas, Droppleman, and Meighan, 1997). Suppaudom, Serisathien, Udjarattan, and Boonchom (1999) revealed that the readiness and rational about pregnancy were related to depression during postpartum period ($p < .05$). Phadungyotee (2002) found that the mothers who had intention of having a baby, they had lower postpartum depression.

Type of family: Family is the supporting resource which consists of instrumental supports and emotional supports. The primiparous adolescent mother is particularly sensitive to the attitudes and actions of persons in her support system which these people include parents, boyfriends or husband, family, friend, and health personal (Beck, 2002; Bobak and Jensen, 1987). The extended family which composed of these people may be support system for primiparous adolescent mothers. The primiparous adolescent mothers who perceive they are receiving for instrumental or emotional support of persons in their support system, they are not discomfort and not disturbance, or they can maintain self-consistency. Conversely, the nuclear family which consists of the primiparous adolescent mother, her husband, and newborn may be lack of social support that the primiparous adolescent mother need. Lack of social support occurs when a mother perceives she is not receiving the amount of instrumental or emotional support she expected (Beck, 2002). These may be result to discomfort and disturbance, or can not maintain self-consistency and expressed in postpartum depression. Suppaudom, Serisathien, Udjarattan, and Boonchom (1999) revealed that most of the mothers lived in extended family and relationship among family members was related to depression during postpartum period. Logsdon, Birkimer, and Usui (2000) found that some African-American mothers wanted postpartum supports especially emotional supports items of someone taking her

worries seriously and not feeling alone. The other importance supports were the reassurance that it is okay to need help, the need for rest, and the need for money.



CHAPTER III

METHODOLOGY

Research Design

This study was a descriptive research. The objectives were to describe maternal role adaptation and postpartum depression in primiparous adolescent mothers and to examine the predictability of family income, readiness to have a child, type of family, and maternal role adaptation on postpartum depression in primiparous adolescent mothers.

Population and Sampling

The population was the primiparous adolescent mothers at the age between 13 and 19 years who follow-up during the 4-6 weeks postpartum at the family planning unit of Maharaj Nakorn Chiang Mai Hospital, Nakornping Hospital, and Mother and child Hospital, Health Promotion Center Region 10. The sample was selected with the inclusion criteria as follow:

1. The adolescent mothers had no severe complications during labor and postpartum period such as, hypertension, heart disease, and diabetes mellitus.
2. The newborn had not severe complications in postpartum period such as, respiratory distress syndrome, congenital heart disease, and diabetes mellitus.
3. The adolescent mothers had no history of psychiatric problems.
4. The adolescent mothers reared their newborns by themselves.

Sample Size

The sample size was calculated based on the Thorndike's formula (Thorndike, 1978 cited by Vorapongsatorn, 1989) as follows:

$$\begin{aligned}n &= 50 + 10k \\n &= \text{sample size} \\k &= \text{number of independent variables}\end{aligned}$$

In this study, there were four independent variables including family income, readiness to have a child, type of family, and maternal role adaptation. The sample size was 90. In this study, the researcher started with 100 primiparous adolescent mothers for missing or incomplete data purposes.

Setting

The setting in this study included the family planning unit at Maharaj Nakorn Chiang Mai Hospital, the services were available every weekday except Wednesday from 08.00 a.m. to 12.00 p.m.; at Nakornping Hospital, and Mother and Child Hospital, Health Promotion Center Region 10, the services were available every Thursday from 08.00 a.m. to 16.00 p.m. The primiparous adolescent mothers followed-up during the 4 to 6 weeks postpartum at these settings.

Instruments

The instruments for data collection in this study were described as follows:

1. The Demographic Data Questionnaire. The questionnaire was developed by the researcher and it was used to elicit information regarding the adolescent's characteristics including age, marital status, education, occupation, family income, relationship in the family, readiness to have a child, abortion, and type of delivery. All items were self-reported by checking lists or filling in the blanks (See Appendix C).

2. Maternal Role Adaptation Questionnaire (See Appendix C). The questionnaire was developed by Khadking (2001) based on Roy adaptation model (Roy & Andrew, 1991; 1999) and the maternal task and responsibility concept (Jensen & Bobak, 1987; 1993). This questionnaire was modified by Masusai (2004) for using in primiparous adolescent mother. The researcher used the maternal role adaptation questionnaire modified by Masusai (2004). There were 33 items of instrumental and expressive behaviors related to maternal role, In this study, the instrumental was modified to be suitable for the sample after submitted to five experts for evaluating appropriateness of the language, clarity, and content validity. Therefore, the researcher delete item 8 because it was similar to item 6 and 7, delete item 29 because it could not examined the maternal role, and added three items to assess reorganization of family relationship. Finally, the questionnaire consisted of 4 aspects, which composed of 34 items as follows:

2.1 Child acceptance comprised of 7 items (item 1-7), the negative item was item 4.

2.2 Childcare competence comprised of 13 items (item 8-20).

2.3 Evaluation of childcare success comprised of 7 items (item 21-27), the negative item were item 23 and item 27.

2.4 Re-establishment of family relationship comprised of 7 items (item 28-34).

The answer of each item was organized into the following 5 point rating scale.

	Meaning
Extremely true	: Information that very strongly matched with the subject's action or feeling.
Mostly true	: Information that strongly matched with the subject's action or feeling.
Fairly true	: Information that moderate matched with the subject's action or feeling.
Slightly true	: Information that little matched with the subject's action or feeling.
Not true at all	: Information that did not match with the subject's action or feeling.

The scoring criteria were as follows :

	Positive items	negative items
Extremely true	5	1
Mostly true	4	2
Fairly true	3	3
Slightly true	2	4
Not true at all	1	5

Interpretation of scores: The possible total score range of the maternal role adaptation questionnaire was at the scores between 34 and 170. High scores indicated good level of maternal role adaptation and low scores indicated poor level of maternal role adaptation in total and each aspect.

Validity of the Instruments

The maternal role adaptation questionnaire was submitted to five experts (Appendix F) for evaluating appropriateness of the language, clarity, and content validity. Therefore, the questionnaires were improved and revised according to suggestions and recommendations of those experts.

Reliability of the Instruments

Maternal Role Adaptation Questionnaire was tried out in 15 primiparous adolescent mothers who had similar characteristics to the study sample and 100 primiparous adolescent mothers who were participants in this study. Cronbach's alpha coefficient was used to test the reliability of the maternal role adaptation questionnaire, alpha .89 and .87 respectively.

3. The Center for Epidemiologic Studies-Depression (CES-D) Scale

The researcher used the Thai version of The Center for Epidemiologic Studies-Depression (CES-D) Scale which was translated by Vorapongsathorn, Pandii, and Triamchaisri (1990) for measuring depression. There were 20 items of instrumental and expressive feeling involving depressed affect, positive affect, somatic and retarded activity, and interpersonal relationship occurrence during the past week including today. Four items were positive (item 4, 8, 12, 16) and sixteen items were negative

The answer of each item was organized into the following four point rating scales.

Meaning

- | | |
|---|---|
| Rarely or None of the time | : The ways that the subjects might have felt or behaved less than 1 day per week. |
| Some or a Little of the time | : The ways that the subjects might have felt or behaved 1-2 day per week. |
| Occasionally or a Moderate Amount of time | : The ways that the subjects might have felt or behaved 3-4 day per week. |
| Most or All of the time | : The ways that the subjects might have felt or behaved 5-7 day per week. |

The scoring criteria are as follow:

	Positive	Negative
Rarely or None of the time	3	0
Some or a Little of the time	2	1
Occasionally or a Moderate Amount of time	1	2
Most or All of the time	0	3

Interpretation of scores: The possible score range from zero to sixty and a score of nineteen or greater than of nineteen indicated risk for maternal depression (Kuptiniratsaikul, Pekuman, 1997), with the higher score indicating more symptoms, weighted by frequency of occurrence during the past week including today.

Thai version of The Center for Epidemiologic Studies-Depression (CES-D) Scale was translated by Vorapongsathorn, Pandii, and Triamchaisri (1990) used a score greater than 16 indicates a high level of depressive symptoms as original version. It was tested to examine reliability, discriminant validity and construct validity by using the samples of 691 in Suan-Sunanta and Ubol-Rajathani Teacher's Colleges and 30 of depressed adolescent samples. The result found that the average score of the normal Teacher's Colleges was 19.5 higher than the cut off score of 16. The depression rate of 691 samples was 60.5%, it was high rate when compared the other studies (Vorapongsathorn, Pandii, and Triamchaisri, 1990).

Then Kuptiniratsaikul, Pekuman (1997) tested the CES-D in Thai comparison with DSM-IV for the optimal cut off point for Thai people. The result found that the cut off score of 19 as an indicator of depression in Thai people with 93.33% sensitivity, 94.2% specificity, and 0.91 reliability. Therefore, the researcher used the cut off score of 19 to indicated risk of maternal depression in this study.

Validity and Reliability of the Instruments

The Center for Epidemiologic Studies-Depression (CES-D) Scale translated in Thai was tested to examine reliability, discriminant validity and construct validity by using the samples of 691 in Suan-Sunanta and Ubol-Rajathani Teacher's Colleges and 30 of depressed adolescent samples. The reliability of the Thai CES-D was .86, as nearly equal to .85 of the original English CES-D. The discriminant validity of this was still not clear even though the average score of the depression adolescences was

significantly. These may be due to the language translation, some item was translated in Thai did not matched with Thai people's feeling. And the based of instrument developed, the CES-D in original version develop for American people which had differential cultural from Thai people (Vorapongsathorn, Pandii, and Triamchaisri, 1990). However, the CES-D could be one of the most useful test for screening of depression (Kuptniratsaikul, Pekuman, 1997)

In this study, instrument in Thai was tried out in 15 primiparous adolescent mothers who had similar characteristics to the study sample and 100 primiparous adolescent mothers who were participants. Cronbach's alpha coefficient was used to test the reliability of the instrument, alpha .89 and .84 respectively.

Data Collection

The process for data collection was as follows:

1. The researcher requested for the approval of the study by the Faculty of Graduate Studies, the Committee on Human Rights Related to Human Experimentation and the Research Ethics Committee of Maharaj Nakorn Chiangmai Hospital.
2. The letters of permission to collect data were obtained from Faculty of Graduate Studies, Mahidol University, those were sent to the Dean of Medicine Faculty, Chiang Mai University, The Director of Nakhonping Hospital, and The Director of Mother and child Hospital, Health Promotion Center Region 10 for request of data collection.
3. The research assistant, who was registered nurse, was trained by the researcher for the data collection.
4. The researcher informed the head nurses of the family planning units of each setting regarding the objectives and the procedures of data collection.
5. On the day of data collection, either the researcher or the research assistant reviewed adolescent mothers' medical records and selected those, who met the inclusion criteria.
6. The researcher or the research assistant approached adolescent mothers who met inclusion criteria and explained the details of the study that included the study objectives, benefits of the study, data collection procedures, length of time for

completion of questionnaires, their rights that they were free to participate, reject, or stop giving information at any time without any adverse effects on the treatment and nursing care which they received and were asked for their cooperation to provide information.

7. The adolescent mother who agreed to participate in the study was asked to sign on the consent form on protection of human subjects.

8. The researcher or the research assistant explained how to respond to the questionnaires and each participant was asked to answer three questionnaires at a time respectively: 1) The Demographic Data Questionnaire 2) Maternal Role Adaptation Questionnaire 3) The Center for Epidemiologic Studies-Depression (CES-D) Scale. While the participants were answering the questionnaires, the researcher or the research assistants was available for clarification if they did not understand any part of the questionnaires. For the participants who could not read Thai language, the researcher or the research assistants would read and explained each item of the questionnaires for participants until they understood those questionnaires.

9. The participants approximately spent around 30 minutes to complete three questionnaires.

10. After the participants completed all of the questionnaires, the researcher or the research assistants reviewed the questionnaires immediately and expressed her gratitude to the participants for their participations.

11. For the participants who lost follow-up, The Research Ethics Committee of Maharaj Nakorn Chiang Mai Hospital suggested that the questionnaires were mailed to participants at home.

Protection of Human Subjects

Before collecting the data, the researcher must obtain a signed consent form explaining the objectives of the study, the data collection procedures, length of time (around 30 minutes) required for completing the questionnaires, and the right to participate or refuse participation in the study. The participants also were advised that they can decline to answer any questions, or they were free to withdraw at any time without any adverse effect on the treatment and nursing care which they received. The

participants assured that data collected from them would be kept strictly confidential and reported only as group data. (See Appendix A)

Data Analysis

The data were analyzed by using the Statistical Package for Social Science Software Package. Data analysis was performed as following steps:

1. Frequency and percentage were used to analyze the demographic characteristics of the participants.
2. Range, mean, and standard deviation were used to analyze the score of maternal role adaptation in total and each aspect.
3. Frequency, percentage, range, mean, and standard deviation were used to analyze the score of postpartum depression.
4. Stepwise Multiple Regressions were used to examine the predictability of family income, ready to having a child, type of family, and maternal role adaptation on postpartum depression in primiparous adolescent mothers.

According to assumptions of stepwise multiple regression, the variable has to be interval scale so that in the calculation, the nominal scale variable was modified to the dummy variable as follow:

Readiness to have a child:	No	= 0
	Yes	= 1
Type of family:	Nuclear	= 0
	Extended	= 1

CHAPTER IV

RESULT

This descriptive research aimed to describe the maternal role adaptation and postpartum depression in primiparous adolescent mothers and to examine whether family income, type of family, readiness to have a child, and maternal role adaptation can predict the postpartum depression in primiparous adolescent mothers. The results of this study were organized into four parts:

1. Demographic characteristics of the participants
2. Maternal role adaptation of the primiparous adolescent mothers
3. Postpartum depression of the primiparous adolescent mothers.
4. The predictor variables on postpartum depression in the primiparous adolescent mothers.

Demographic Characteristics of the Participants

The participants in this study were primiparous adolescent mothers whose ages ranged between 13 and 19 years. A mean age was 18.10 years ($SD=1.31$). Majority of the participants were 18 to 19 years (73%). Almost all of the participants (98%) were living with husband. More than half (57%) had attained high school. Around fifty two percent (52%) were housewives or unemployed, while twenty four percent were employee. More than half (52%) had family income lower than 5,001 Baht/month with a mean of 6,702 Baht/month ($SD=5944.63$). Nearly two-third (65%) of the participants perceived that their family income was sufficient. More than two-third (69%) lived in extended family. Majority of the participants (74%) had a good family relationship and twenty six percent had a very good family relationship. More than half (64%) were ready to have a child. Majority of the participants (81%) were never abort and had normal delivery (82%). The details of characteristics data were shown in Table 1.

Table 1 Demographic Characteristics of the Participants (n=100)

Characteristics of the participants	Frequency	Percentage
Age (years)		
13-15	4	4.00
16-17	23	23.00
18-19	73	73.00
Min-Max	13-19 years	
Mean (SD)	18.10 (1.31)	
Marital status		
Couple	98	98.00
Widowed/ Divorced/ Separated	2	2.00
Education Level		
No education	5	5.00
Primary school	13	13.00
High school	57	57.00
Primary vocational certification	16	16.00
High vocational certification	8	8.00
Diploma	1	1.00
Occupation		
Unemployed / Housewife	52	52.00
Employee	24	24.00
Student	12	12.00
Merchant	8	8.00
Business	2	2.00
Other (Agriculturalist)	2	2.00

Table 1 Demographic Characteristics of the Participants (n=100) (continued)

Characteristics of the participants	Frequency	Percentage
Family income (baht/month)		
≤ 5,000	52	52.00
5,001-10,000	36	36.00
10,001-15,000	8	8.00
> 15,000	4	4.00
Min-Max	500-40,000	(baht/month)
Mean (SD)	6702.00	(5944.63)
Sufficiency of income		
Sufficient	65	65.00
Insufficient	35	35.00
Type of family		
Extended family	69	69.00
Nuclear family	31	31.00
Relationship in the family		
Good	74	74.00
Very good	26	26.00
Readiness to have a child		
Ready	64	64.00
Not ready	36	36.00
Abortion History		
No	81	81.00
Yes	19	19.00
Type of delivery		
Normal	82	82.00
Cesarean section	8	8.00
Vacuum	6	6.00
Forceps	4	4.00

Maternal Role Adaptation of the Primiparous Adolescent Mothers

The study revealed that a mean score of maternal role adaptation was at a high level (Mean = 147.76, SD = 12.3), with an actual range of 111-168 and a possible range of 34 to 170.

The maternal role adaptation consisted of 4 aspects, which composed of 34 items. The item numbers of each aspect of maternal role adaptation were unequal, and the results could not refer to differences in each aspect. Therefore, the investigator calculated the mean score of each aspect according to the rating scale of the questionnaire. The calculation of this mean score was performed by dividing the score of each aspect of maternal role adaptation with the number of items of each aspect.

Considering each aspect, child acceptance was the highest score (mean= 4.86, SD= .52) followed by childcare competence (mean= 4.80, SD= .40), evaluation of child care success (mean= 4.66, SD= .48), and re-establishment of family relationship (mean= 4.52, SD= .67), respectively as shown in Table 2. The higher score indicated that the participants had a higher level of the maternal role adaptation.

Table 2 Range, Mean and Standard deviation of Maternal Role Adaptation Score in Total and Each Aspect

Maternal role adaptation	Possible range	Actual range	Mean	SD
Total	1-5	2-5	4.68	.52
1. Child acceptance (7 items)	1-5	4-5	4.86	.35
2. Childcare competence (13 items)	1-5	4-5	4.80	.40
3. Evaluation of child care success (7 items)	1-5	4-5	4.66	.48
4. Re-establishment of family relationship (7 items)	1-5	2-5	4.52	.67

Postpartum Depression in Primiparous Adolescent Mothers.

According to Table 3, postpartum depression score of the participants range from 0-45 with a mean of 13.92 and standard deviation was 7.96. Twenty six percentage of participants had postpartum depression.

Table 3 Frequency, Percentage, Range, Mean, and Standard deviation of Postpartum Depression in Primiparous Adolescent Mothers. (n=100)

Range of score	Frequency	Percentage
Lower than 19	74	74.00
19 or greater	26	26.00
Possible range = 0-60	Actual range = 0-45	Mean =13.92
		SD = 7.96

Correlation between Variables

Postpartum depressions had a significant negative relationship to maternal role adaptation ($r = -.391, p < .01$), and readiness to have a child ($r = -.184, p < .05$). Maternal role adaptation had a significant positive relationship to readiness to have a child ($r = .323, p < .01$). Readiness to have a child had a significant negative relationship to type of family ($r = -.275, p < .01$). Type of family had a significant negative relationship to family income ($r = -.229, p < .05$). As shown in Table 4.

Table 4 Correlation between variables (n=100)

Variables	1	2	3	4	5
1.Family income	1				
2.Type of family	-.229*	1			
3.Readiness to have a child	.164	-.275 **	1		
4.Maternal role adaptation	.112	-.037	.323 **	1	
5.Postpartum depression	-.158	-.005	-.184 *	-.391 **	1

* $p < 0.05$, ** $p < .01$

Testing for the Assumption of Regression

Before regression analysis was generated, the assumption testing was performed. The results of assumption testing were presented as follows:

Normal distribution

The normal distribution was tested by using the Kolmogorov-Sminov goodness of fit test. The result showed that the scores of maternal role adaptation and postpartum depression were normal distribution. But family income was not normal distribution. Therefore, scores of this variable was transformed to logarithm for normal distribution (Wanichbuncha, K., 2003). (Figure 3, Table 5, See Appendix D).

Linearity and Homoscedasticity

This assumption was checked by normal probability. The result revealed that the relationship between the dependent variable and independent are held constant. The data would form a straight line from the lower left corner to the upper-right corner. The plotted values fall close to the line of the normal probability plot. (Figure 4, See Appendix D)

Autocorrelation

The autocorrelation was tested by the Durbin-Watson test. The result showed that no autocorrelation. (Appendix D)

Multicollinearity

The correlation coefficients among predictive variables, Tolerance and Variance inflation factor (VIF) were used for collinearity test. The results indicated no evidence of multicollinerity. (Appendix D)

The Predictor Variables on Postpartum Depression of Primiparous Adolescent Mothers

Multiple regression analysis was computed after the testing for the assumption of regression accepted. The result showed that only maternal role adaptation could predict 15.3 percentage of the variance in the postpartum depression (F change= 16.991, R^2 = .153, p < .001). As shown in Table 5.

Table 5 Multiple Regression of Family income, Readiness to have a child, Type of family, and Maternal role adaptation on Postpartum Depression in Primiparous Adolescent Mothers

Variable	R	R ²	R ²	F	b	Beta	t
			Change	Change			
Maternal Role Adaptation	.391	.153	.153	16.991	-.253	-.391	-4.122*

Constant = 51.265, R = .391, R² = .153, Overall F = 16.991

* p < .001

CHAPTER V

DISCUSSION

The purposes of this study were to investigate maternal role adaptation and postpartum depression in primiparous adolescent mothers and to examine the predictability of family income, readiness to have a child, type of family, and maternal role adaptation on postpartum depression in primiparous adolescent mothers. The discussion of the findings was conducted according to the purposes of the study and hypothesis.

Characteristic of the Primiparous Adolescent Mothers

The participants in this study were primiparous adolescent mothers whose ages were between 13 and 19 years. Majority of the participants (73%) were late adolescents with mean score of age at 18.10 years ($SD=1.31$). Literature revealed that sexual identity is usually firmly established during late adolescence (Leifer, 2005). Rapid growth occurs during adolescence and it is biologically possible for the adolescent female to become a parent (Manning, 2006).

Almost all of the participants (98%) were living with husband. More than half of participants (57%) had attained high school level, fifty two percent of this group was house wives or unemployed, and twelve percent was students. Some participants reported that they were studying when they got pregnant so they had to drop out from school. New educational programs on the importance of delaying pregnancy have decreased the number of births in girls under age of 18 years. The reasons for this phenomenon may be due to earlier age of menarche in girls, increasing in the rate of sexual activity among teenage, lack of knowledge about contraceptives and desire by young girls to have a child (Klossner & Hatfield, 2006). Research reviews indicated that adolescent mothers tend to have lower educational achievement, less stable job skills, poorer social and emotional adjustment, greater welfare use, higher rates of poverty, and slightly higher levels of health problems after childbearing than do adolescent peer who postpone childrearing (Budd, Holdsworth, & HoganBrien,

2005). The main cause of dropping out of school for adolescent girls is pregnancy; sexual activity is often associated with poor school performance. The level of formal education is an important predictor of job advancement and earning potential (Leifer, 2005).

Although about a half (52%) of the participants had family income lower than 5,001 Baht/month but nearly two-third (65%) of the participants perceived that their family income was sufficient. More than two-third (69%) lived in extended family, which is the culture of the north of Thai family characteristics. In common, mothers would like to live with their parents, their cousin, or relatives during postpartum period. An advantage of extended family is that it contains more people to serve as resources during crises, both financial and psychological (Pillitteri, 2007). Some participants reported that after birth they were living with their parents, sometime they had insufficient revenue, their parents would support them.

The majority (74%) of the participants had good family relationship and more than half (64%) were ready to have a child. For the reasons of readiness to have a child, some participants reported that it was to meet their needs and their husband's or their parents's needs. Most of Thai family believed that having a child could help in fulfillment of the family. Good family relationship and the perception of the couples that they were ready to have a child, were the main reason for planning pregnancy and they were wanted child. Safonova & Leparsky (1998) found that women with unplanned pregnancies and poor marital relationships were unwanted child.

Maternal Role Adaptation in Primiparous Adolescent Mothers

This study revealed that total scores of the participants's maternal role adaptation were at high score (mean = 4.68, SD= .52) (Table 2). This result is consistent with Masusai (2004), who studied 100 primiparous adolescent mothers aged between 13 and 20 years and found that about a half of participants (51%) had a higher level of maternal role adaptation.

The result could be due to the fact that more than half (64%) of the participants demonstrated readiness to have a child. Besides maternal role adaptation had a significantly and positive relationship with readiness to have a child ($r = .323, p < .01$). Thus; readiness to have a child may motivate the mothers to be active in motherhood.

Then, they may prepare themselves to provide care for the child including seeking information related to childrearing. Moreover, most of the participants (82%) had finished at least high school. This may facilitate them to find information about childrearing. Education level can be to increase the capacity of seeking and using information which might add more knowledge in childrearing of mothers. Consistent with Sriyasak (1996) who found that receiving infant care knowledge was positively related to maternal role adaptation of adolescent mothers.

Likewise, most of the participants (93%) were living with husband and almost of them (74%) had good and very good relationship within the family. Because of the adolescent mothers, in this age group needs physical and psychosocial support especially the supporting from significant persons such as her own mother and her husband. During postpartum period, the husband can provide both emotional and tangible support that can help his wife to adapt well in her maternal role (Sawatpanich, 2003). Consistency to Varachanonth (1998) who reported that the mothers who received spousal support could adapt to mothering role better than those who did not received that support. A woman's adjustment to her role as a mother is affected greatly by her relationships with her partner, her mother and other relatives, and any other children (Cashion, 2004). Sookavanawat (1998) found that marital relationship and perceiving the infant behavior could jointly predict the maternal role adaptation in primiparous adolescents.

Moreover, more than two-thirds of the participants (69%) lived in extended family; almost all of the participants were living with parents and the participant's relatives. The number of members in a mother's social network was as the social support for mother and social support is strongly related to positive adaptation by new parents, including adolescent parents, during the transition to parenthood (Wong, Perry, Hockenberry, Lowdermilk, & Wilson, 2006). Adolescent mothers appear to need the emotional support of those in their environments to function effectively in the mothering role (Dormire, Strauss, & Clarke, 1989). They could immediately consult when they had some problem about childrearing. This support may be affects their confidence in providing infant care and resulted to effective maternal role adaptation in the primiparous adolescent mothers. Grandparents can be encouraged to help with household tasks and offer positive suggestions and guidance that enable the adolescent

mother to develop coping skills (Leifer, 2005). Panmaung (2002) reported that the primiparous adolescent mothers who received the mother's support, they could adapt to maternal role better than those not received the mother's support ($R^2 = .147$, $p < .01$). And majority of the participants were housewives or unemployed, so they had times to learning and training for maternal role which assisted they could adapted to maternal role.

Considering each aspect of maternal role adaptation, It was found that all of aspects of maternal role adaptation were high score as follow:

1. Childcare acceptance, had the highest score (mean= 4.86, SD= .35). It was consistent with Masusai (2004) who found that childcare acceptance had the highest score in 100 adolescent mothers. This result indicated that most of the participants accepted the infant's physical appearance, sex, innate temperament, and physical status. Although the real child may be differs greatly from the fantasy child, the participants perceived the newborn as a person separately from themselves who has many dependency needs and require much nurturing (Bobak, 1993). The highest score of childcare acceptance may be explained that the sample (64%) was ready to have a child. This may lead them to be happy to involve in childrearing. It is a time of great joy and immense happiness. Furthermore, most of the participants had normal delivery (82%), no severe complications during pregnancy, labor and postpartum period, they also had the healthy baby, therefore the mother can see, touch and react to the baby immediately after birth. Moreover during 4-6 weeks postpartum period, the participants took care of the infants by themselves, then they interacted with their infants all the time. These help the mother and the infant learn and adjust to each other, then the mother easily accept the infant and the childcare role.

2. Childcare competence was at a high score (mean= 4.80, SD= .40). This meant that the participants feel capable of providing childcare activity to the infants. For example, they could perceive the cues given to indicate needs, and responding appropriately to those needs. This result may be explained to that most of the participants were primiparous mothers and ready to have a child. Therefore, they may be proud of their maternal role and try to make it effective by seeking information about motherhood and childrearing decreased the stress. Besides the participants were living in extended family then they may learned how to care for the child from the

experienced member of the family such as their own mother or sister. This may enable the adolescent mothers to develop childcare competence and effective maternal role. The experience in infant care for 4-6 weeks could significantly increase the childcare competence of adolescent mother (Secco, Ateah, Woodgate, & Moffatt, 2001). At this time, the mother-infant interaction were reciprocity and synchrony and the mothers could learn infant's needs by observing infant behaviors and infants would response to maternal care with different behavior. When the mother perceived the infant needs and responded appropriately to them, this enables the mothers to develop childcare competence.

3. Evaluation of childcare success was at a high score (mean= 4.66, SD= .48). This meant that the participants could establish reasonable evaluative criteria for assessing the success or failure of the care given to the infant. This may be explained that most of the participants took care of infant by themselves, so they could learn by doing and developed skill about infant care activity. The growth and developmental of infant could be indicator to the care receiving. Example of infant behaviors which are interpreted by mothers as, Positive responses from the infant to their care such as being easily consoled, enjoying cuddled, and making eye contact (Edwards, 2000). The positive responses of infant to the mother's care could increase self-confidence and self-esteem of adolescent mothers. Self-esteem grows with competence (Edwards, 2004). Therefore, the participants could evaluate themselves success in childcare at a high score.

4. Re-establishment of family relationship was at a high score (mean= 4.52, SD= .67). It may be explained that most of the participants were ready to have a child and had good to very good relationship in the family. Moreover, most of the children were the first-born baby. Therefore, all family members may be feel comfortable to glad and excited to accept the baby. This was likely that all family members adjust their roles to accommodate the newcomer. Likewise, during 4-6 weeks postpartum period was sufficient to facilitate adaptation of all family members and developed relationship with infant. This aspect had the lowest score comparing to the other aspects (61%). This may be due to Thai culture in which many women believed that the infant care and homework were mother's responsibility. Thus, most of the mother's time in the postpartum period was used for infant care more than for spouse.

Cultural belief and practices are important determinants of parenting behaviors (Edwards, 2004). Moreover, when considering each item, it was found that 30 % of the participants selected fairly true for the satisfying with their sexual relationship. Because during postpartum and breast feeding mothers may have vaginal dryness and discomfort during sexual intercourse (Leifer, 2005). And before the discharge, the mothers were advised from the nurse to refrain from sexual intercourse during 4-6 weeks postpartum period then they might deal with uncomfortable feeling during sexual intercourse.

Postpartum Depression in Primiparous Adolescent Mothers.

This study revealed that postpartum depression score of the participants range from 0-45 with a mean of 13.92, standard deviation was 7.96. The cut off score of 19 indicated risk of maternal depression. Therefore, twenty six percent of the participants experienced depression. However, Nirattharadorn's study (2005) found that 54.71% of adolescent mothers experience depressive symptoms during the postpartum period by using the same instrument and cut-off point score. The incidence of postpartum depression of adolescent mothers of this study was lower than that of Nirattharadorn's study. A possible explanation is that most of the participants in this study lived in extended family in which the mother may be received instrumental and emotional support from their parent or relatives. It was consistent with the study in the western countries in which most of mother lived in nuclear family and had high rate of postpartum depression. Up to 47% of postpartum adolescents experienced significant symptoms of depression (DeRosa & Lonsdon, 2006). Phadungyotee (2002), in her study of 200 subjects, used the same instrument and cut-off point score. She found that 25% of mothers were depressed. Only 8% of the sample was younger than 20 years old. Then the comparison between the rates of postpartum depression could not be made because of the difference in characteristics of participants. Postpartum depression is a relatively common phenomenon in the maternal population and often is attributed to changes in hormone levels and role expectations of the new mother (Hudson, Elek, & Campbell-Grossman, 2000).

More than half of the participants (52%) was housewives and around twelve percent was students. In adolescent age, they should be studying in the school and

have fun activities with their peers group. When they got pregnant, they had to drop out from school so, they had low education. Lower educational achievement is often associated with job advancement and earning potential. These may affect postpartum depression in primiparous adolescent mothers. A major factor that influences the psychological impact of motherhood is a woman's level of maturity and readiness for childbearing (Leifer, 2005). Coping with the developmental task of parenthood is often complicated by the unmet developmental needs and task of adolescence. When the development tasks of adolescents are incomplete, they may feel different from their peers, excluded from fun activities, and prematurely forced to enter an adult social role (Wong, 2006). Therefore adolescent mothers are often unprepared for the task of parenting and have relatively high rates of depression (Black, Papas, Hussey, Hunter, Dubowitz, Kotch, J. B., et al., 2002).

Research Hypothesis: Family income, readiness to have a child, type of family, and maternal role adaptation can predict postpartum depression in the primiparous adolescent mothers.

This study found that maternal role adaptation was only variable that could predict postpartum depression in primiparous adolescent mothers.

Maternal role adaptation could explain 15.3% of the variance in postpartum depression at statistical significance (R^2 change = .153, $\beta = -.391$, $t = -4.122$, $p < .001$). Pearson's Product Moment with correlation revealed that maternal role adaptation had a significant and negative relationship postpartum depression ($r = -.391$, $p < .01$). This meant that the primiparous adolescent mothers who had ineffective maternal role adaptation experienced postpartum depression. Although, most of the participants were ready to have a child, lack of knowledge about infant development and childrearing experiences might decrease confidence and increase stress for the adolescent mothers. Ruchala and James (1997) found that an adolescent's knowledge of infant development significantly affect her confidence in providing infant care. Moreover many women have ambivalent feeling, being both happy at the thought of parenthood but sad at the thought of loss freedom (Leifer, 2005). Women who have postpartum depression often experience a cognitive dissonance between glad to enjoy their children and ambivalent feeling (Chaudron, 2003). The transition to parenthood

is described as a time of disorder and disequilibrium (Wong, Perry, & Hockenberry, 2002). The adolescent mothers might have inadequate coping skills to manage the transition to parenthood and parenting responsibilities yhus, they might feel overwhelmed (Leifer, 2005). Wongvisetsirikul (1997) found that the transition to motherhood was negatively related to postpartum anxiety and depression ($r = -.15$, $p < .05$). Wooravong (1994) studied the transition to motherhood of primiparous adolescent mothers compare with primiparous adult mothers and found that the primiparous adult mothers could adapt to maternal role better than primiparous adolescent mothers ($t = -2.65$, $p < .05$). Roy (1999) viewed that self-consistency is a part of the personal self component which strives to avoid disequilibrium (Roy & Andrew, 1999). Adolescent mothers who had experienced depression might face with disequilibrium and could not maintain their self-consistency. Then they may would be suffering with depression. The mothers need some behaviors and skills to deal with the changes and disequilibrium caused by parenthood (Edwards, 1999).

However, this study reveled that family income, readiness to have a child, and type of family could not predict postpartum depression in the primiparous adolescent mothers. This may be explained as follow:

Family income: Teenage pregnancy remains the number one cause of adolescent girls to terminate their education prematurely. Leaving school early is associated with unemployment and poverty (Johnson, 1995). The adolescent is not prepared psychologically or economically for parenthood (Leifer, 2005). Low-income mothers may have to contend with stressors that distract them from developing a relationship with their babies. Inability to pay for infant supplies or child care, chaotic home situations, and worry over eligibility for social and health care services deplete these women 's psychological energy (Edwards, 2000). Study of Phadungyotee (2002) revealed that family income could explain 1.7 % of the variance of postpartum depression scores at statistical significance (R^2 change= .017. $\beta = -.135$, $t = -2.327$, $p < .05$). Kerdphrasert's study (1999) found that postpartum depression was negatively related to family income ($r = -.17$, $p < .05$). In this study, although around half (52%) of the participants had family income lower than 5,001 Baht/month but majority (65%) of the participants perceived that their family income was sufficient. Moreover, some participants reported that after birth they were living with their parents.

Sometimes, they had insufficiency of revenue, but their parents would support them. This revealed that adolescent mothers may received economic support from their parents or relatives but they did not report as income.

Readiness to have a child: Majority of participants (64%) was ready to have a child. The mothers who are ready to have a child may provide them with the necessary skill and knowledge to becoming a mother. It can affect the adolescent mother's ability to care for her baby and, in particular, to deal with negative responses from the baby to her care such as crying and fussy that can contribute to depressive symptoms (Secco, Profit, Kennedy, Walsh, Letourneau, & Stewart, 2007). Suppaudom, Serisathien, Udjarattan, and Boonchom (1999) revealed that the readiness and rational about pregnancy were related to depression during postpartum period ($p < .05$). Phadungyotee (2002) found that the mothers who had intention of having a baby had lower postpartum depression. In this study, Pearson's Product Moment with correlation revealed that maternal role adaptation had a significant and positive relationship readiness to have a child ($r = .323, p < .01$) and maternal role adaptation had a significant and negative relationship postpartum depression ($r = -.391, p < .01$). Then, multiple regression analysis was computed, the result showed that readiness to have a child could not predict the variance in the postpartum depression.

Type of family: Lack of a confidant, living alone or in a house shared with people other than a partner and lack of support from members of the women's primary group have been associated with increased postnatal depressive symptoms (National Health and Medical research Council, 2000). Suppaudom, Serisathien, Udjarattan, and Boonchom (1999) revealed that characteristic of the family and relationship among family members was related to depression during postpartum period. This may be explained that all participants's family relationship were at good to very good level, thus type of family in this study might not affect the participant's depression because there was no variation.

CHAPTER VI

CONCLUSION

This study was descriptive research, which aimed to describe the maternal role adaptation, postpartum depression and to examine whether family income, type of family, ready of having a child and maternal role adaptation can predict postpartum depression in primiparous adolescent mothers. This study based on Roy adaptation model (Roy & Andrew, 1999).

The research sample consisted of 100 primiparous adolescent mothers at the age between 13 and 19 years who attending the postpartum check-up unit at 4-6 weeks of Maharaj Nakorn Chiangmai Hospital, Nakornping Hospital, and Mother and Child Hospital, Health Promotion Center Region 10 during May to August 2005.

Data were collected by questionnaires. The participants in this study completed three questionnaires which consisted of: 1) The demographic data questionnaire 2) Maternal role adaptation questionnaire 3) The Center for Epidemiologic Studies-Depression (CES-D) Scale, respectively.

All instruments were validated by five experts for evaluating appropriateness of the language, clarity and content validity. The reliability of Maternal role adaptation questionnaire and The Center for Epidemiologic Studies-Depression (CES-D) Scale were examined through Cronbach' s alpha coefficients with a pilot study sample (n=15). The Cronbach' s alpha coefficients for Maternal role adaptation questionnaire and The Center for Epidemiologic Studies-Depression (CES-D) Scale were .89 and .895, respectively. Descriptive Statistic was used to analyze the demographic data, the score of level of maternal role adaptation, and the score of level of postpartum depression in primiparous adolescent mothers. Then stepwise Multiple Regression Analysis was used to examine the predictability of family income, readiness to have a child, type of the family, and maternal role adaptation on postpartum depression in primiparous adolescent mothers.

The results of this study revealed that the majority of primiparous adolescent mothers were 18 to 19 years, lived with husband, attained high school, housewives or

unemployed, family income lower than 5,001 baht/month, perceived adequate for their family income, lived in extended family, had a good family relationship, readiness to have a child, they were never been abortion, and had normal delivery.

Majority of primiparous adolescent mothers had maternal role adaptation in total and each aspect scores were at high score.

Postpartum depression was measured by using the Center for Epidemiologic Studies Depression Scale found that postpartum depression score of the participants range from 0-45 with mean 13.92, standard deviation was 7.96. When used the cut off score of 19 to indicated risk of maternal depression, found that twenty six percentages of participants had postpartum depression, whereas seventy four percentages of participants had no postpartum depression. The result of Stepwise multiple regression analysis showed that maternal role adaptation was only variable could predict 15.3% postpartum depression in primiparous adolescent mothers.

Recommendations for Nursing Practice

1. The result of this study revealed that 26% of the primiparous adolescent mothers experienced postpartum depression which indicated that the primiparous adolescent mothers were at risk for postpartum depression. This result can guide nurses to early detect postpartum depression, it is recommended that a standard screening of postpartum depression should be established in postpartum care unit. The early detection can help the adolescent mothers who are at risk for depression during postpartum period received an appropriate nursing care.

2. The finding were shown that maternal role adaptation could predict 15.3 % of variance in the postpartum depression. Therefore, nurses of antenatal care unit and postpartum care unit can help identify mothers who are at risk for depression from evaluation of this factor and enhancing the maternal role adaptation in primiparous adolescent mothers can help decrease maternal depression.

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Recommendations for future research

1. The qualitative research with in-depth interview of adolescent mothers who are depression that is suggested because of the findings might add more conclusive knowledge in the area of adolescent maternal depression.
2. Furthermore, the study on adolescent maternal depression and an intervention to prevent or manage postpartum depression in primiparous adolescent mothers are interesting issue.
3. Longitudinal study to follow-up the adolescent mothers who experience depression for continuing care.
4. Although there are several instrument for measuring depression but the study about an appropriate cutting point score for identifying Thai adolescent mothers who are at risk of depression remain needed.

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APPENDIX A



บันทึกข้อความ

ส่วนราชการ คณะสาธารณสุขศาสตร์ โทรศัพท์ +๖๖๓ ๑๑๐๕ โทรสาร +๖๖๓-๑๑๑๗

ที่ ศธ ๐๕๑๗.๑๔/๕๓ ๕๓

วันที่ ๒๑ พฤศจิกายน ๒๕๖๗

เรื่อง ยินดีอนุญาตให้ใช้เครื่องมือวิจัย

เรียน ประธานคณะกรรมการบริหารหลักสูตรพยาบาลศาสตรมหาบัณฑิต

ตามหนังสือที่ ศธ ๐๕๑๗.๐๕ (พย.ม.)/๒๑๗ ลงวันที่ ๑๗ ตุลาคม ๒๕๖๗ ประธานคณะกรรมการบริหารหลักสูตรพยาบาลศาสตรมหาบัณฑิต คณะพยาบาลศาสตร์ ขออนุญาตให้เครื่องมือวิจัยแบบทดสอบวัดความเข้มเศร้า (CFS-D) ฉบับที่แปลเป็นภาษาไทย โดย

- | | | |
|------------------------------|--------------|---------------------------|
| ๑. รองศาสตราจารย์อัมย์ชัย | วรพงษ์ศรี | ภาควิชาชีวสถิติ |
| ๒. ผู้ช่วยศาสตราจารย์วงเดือน | บันดี | ภาควิชาปรสิตวิทยา |
| ๓. รองศาสตราจารย์สมพร | เตรียมชัยศรี | ภาควิชาการพยาบาลสาธารณสุข |

เพื่อประกอบการทำวิทยานิพนธ์ ของ นางสาวสมพิศ อ่ำไพ นักศึกษาหลักสูตรพยาบาลศาสตรมหาบัณฑิต สาขาการพยาบาลมารดาและทารกแรกเกิด คณะพยาบาลศาสตร์ มหาวิทยาลัยมหิดล ตั้งความละเอียดแจ้งแล้ว นั้น

ในการนี้ คณะสาธารณสุขศาสตร์พิจารณาแล้วไม่ขัดข้อง ยินดีอนุญาตให้ ยินดีอนุญาตให้ เครื่องมือวิจัย ดังกล่าวได้

จึงเรียนมาเพื่อโปรดทราบ

กราบ

ศาสตราจารย์ ดร. นงนุช อดิเรก

รองศาสตราจารย์ นงนุช อดิเรก

๒๑ พฤศจิกายน ๒๕๖๗

๒๕ พ.ย. ๒๕๖๗

(รองศาสตราจารย์อัมย์ชัย พงษ์วรารัตน์)

รองคณบดีฝ่ายบริหาร

ปฏิบัติราชการแทน คณบดีคณะสาธารณสุขศาสตร์

**กรณีที่ผู้เข้าร่วมโครงการวิจัยที่บรรลุนิติภาวะ
หนังสือแสดงความยินยอมการเข้าร่วมในโครงการวิจัย**

INFORMED CONSENT FORM

ข้าพเจ้า นาย/นาง/นางสาว ที่อยู่.....
บัตรประจำตัวประชาชน/ข้าราชการ เลขที่..... ขอให้ความยินยอมของตนเองที่จะ
เข้าเกี่ยวข้องในการวิจัย/ค้นคว้า เรื่อง ปัจจัยส่วนบุคคล การปรับตัวต่อบทบาทการเป็นมารดา และ
ภาวะซึมเศร้าระยะหลังคลอดในมารดาวัยรุ่นที่คลอดบุตรคนแรก ซึ่งผู้วิจัยได้แก่ นางสาวสมพิศ
อำไพ ได้อธิบายต่อข้าพเจ้าเกี่ยวกับการวิจัยครั้งนี้แล้ว

ผู้วิจัยมีความยินดีที่จะให้คำตอบต่อคำถามประการใดที่ข้าพเจ้าอาจจะมีได้ตลอดระยะเวลา
การเข้าร่วมการวิจัยครั้งนี้ ผู้วิจัยรับรองว่าจะเก็บข้อมูลเฉพาะที่เกี่ยวกับตัวข้าพเจ้าเป็นความลับ และ
จะเปิดเผยได้เฉพาะในรูปที่เป็นสรุปผลการวิจัยและผู้วิจัยจะได้ปฏิบัติในสิ่งที่ไม่ก่อให้เกิดอันตราย
ต่อร่างกายหรือจิตใจของข้าพเจ้า ตลอดการวิจัยนี้ และรับรองว่า หากเกิดมีอันตรายใด ๆ จากการวิจัย
ดังกล่าว ผู้ยินยอมจะได้รับการรักษาอย่างเต็มที่

ข้าพเจ้ายินยอมเข้าร่วมการวิจัยโดยสมัครใจ และสามารถที่จะถอนตัวจากการวิจัยนี้เมื่อใดก็ได้
ทั้งนี้โดยไม่มีผลกระทบต่อการรักษาพยาบาลที่ข้าพเจ้าจะได้รับถ้าหากข้าพเจ้าเป็นผู้ป่วย และในกรณี
ที่เกิดข้อข้องใจหรือปัญหาที่ข้าพเจ้าต้องการปรึกษากับผู้วิจัย ข้าพเจ้าสามารถติดต่อกับผู้วิจัย คือ
นางสาวสมพิศ อำไพ ได้ที่หอพักพยาบาลอาคาร 3 (หอพักอาจารย์พยาบาล) โรงพยาบาลมหาราช
นครเชียงใหม่ อำเภอเมือง จังหวัดเชียงใหม่ เบอร์โทรศัพท์ 053 – 945022 ต่อห้อง 210 มือถือ 01 –
7167947

ลงนาม ผู้ยินยอม

ลงนาม ผู้วิจัย

ลงนาม พยาน

ลงนาม พยาน

วันที่

กรณีที่ผู้เข้าร่วมโครงการวิจัยยังไม่บรรลุนิติภาวะ
หนังสือแสดงความยินยอมการเข้าร่วมในโครงการวิจัย

INFORMED CONSENT FORM

ข้าพเจ้านาย/นาง/นางสาว.....ที่อยู่.....
บัตรประจำตัวประชาชน/ข้าราชการ เลขที่ ขอให้ความยินยอมของบุคคลใน
ปกครองของข้าพเจ้าได้แก่.....ที่จะเข้าเกี่ยวข้องในการวิจัย/ค้นคว้า เรื่อง ปัจจัย
ส่วนบุคคล การปรับตัวต่อบทบาทการเป็นมารดาและภาวะซึมเศร้าระยะหลังคลอดในมารดาวัยรุ่นที่
คลอดบุตรคนแรกซึ่งผู้วิจัยได้แก่ นางสาวสมพิศ อำไพ ได้อธิบายต่อข้าพเจ้าเกี่ยวกับการวิจัยครั้งนี้
แล้ว (ตามรายละเอียดที่แนบมากับหนังสือยินยอมนี้)

ผู้วิจัยมีความยินดีที่จะให้คำตอบต่อคำถามประการใดที่ข้าพเจ้าอาจจะมีได้ตลอดระยะเวลา
การเข้าร่วมการวิจัยครั้งนี้ ผู้วิจัยรับรองว่าจะเก็บข้อมูลเฉพาะที่เกี่ยวข้องกับบุคคลในปกครองของ
ข้าพเจ้าเป็นความลับ และจะเปิดเผยได้เฉพาะในรูปที่เป็นสรุปผลการวิจัย และผู้วิจัยจะได้ปฏิบัติใน
สิ่งที่ไม่ก่อให้เกิดอันตรายต่อร่างกายหรือจิตใจของบุคคลในปกครองของข้าพเจ้าตลอดการวิจัยนี้
และรับรองว่าหากเกิดมีอันตรายใด ๆ จากการวิจัยดังกล่าว บุคคลในปกครองของข้าพเจ้าจะได้รับ
การรักษาอย่างเต็มที่

ข้าพเจ้ายินยอมให้บุคคลในปกครองของข้าพเจ้าเข้าร่วมวิจัยโดยสมัครใจ และสามารถที่จะ
ถอนตัวจากการวิจัยนี้เมื่อใดก็ได้ ทั้งนี้โดยไม่มีผลกระทบต่อการรักษาพยาบาลที่บุคคลในปกครอง
ของข้าพเจ้าจะได้รับ และในกรณีที่เกิดข้อข้องใจหรือปัญหาที่ข้าพเจ้าต้องการปรึกษากับผู้วิจัย
ข้าพเจ้าสามารถติดต่อกับผู้วิจัย คือ นางสาวสมพิศ อำไพ ได้ที่หอพักพยาบาลอาคาร 3 (หอพัก
อาจารย์พยาบาล) โรงพยาบาลมหาราชนครเชียงใหม่ อำเภอเมือง จังหวัดเชียงใหม่ เบอร์โทรศัพท์
053 – 945022 ต่อห้อง 210 มือถือ 01 – 7167947

ลงนาม ผู้ยินยอม

ลงนาม.....บิดา มารดาหรือ

.....ปกครองของผู้ยินยอม

ลงนาม ผู้วิจัย

ลงนาม.....พยาน

ลงนาม.....พยาน

APPENDIX B



เอกสารเลขที่ 115/2548

เอกสารรับรองโครงการวิจัยใหม่

ชื่อคณะกรรมการจริยธรรมการวิจัย : คณะกรรมการจริยธรรมการวิจัย คณะแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่

ที่อยู่ : 110 ถนนอินทวิโรต ต่าบลขรัภูมิ อำเภอเมือง จังหวัดเชียงใหม่ 50200

ชื่อหัวหน้าโครงการวิจัย : นางสาวสมทิพย์ ยาใจ

สังกัด : คณะแพทยศาสตร์ มหาวิทยาลัยมหิดล

ชื่อเรื่องโครงการวิจัย : ปัจจัยส่วนบุคคล การปรับตัวต่อบทบาทการเป็นมารดา และภาวะซึมเศร้าระยะหลังคลอดในมารดา วัยรุ่นที่คลอดบุตรคนแรก	
เอกสารที่รับรอง	เอกสารอ้างอิง (เอกสารอ้างอิง, หรือ วันที่อ้างอิงฉบับที่, วันที่)
โครงการวิจัย	- หนังสือที่ ศธ 0517.05(พย.ม.)/209 ลงวันที่ 16 มีนาคม 2548
ส่วนปรับปรุงแก้ไขโครงการวิจัย	-
หนังสือแสดงความยินยอม/ข้อมูลสำหรับผู้ป่วย	- หนังสือที่ ศธ 0517.05(พย.ม.)/209 ลงวันที่ 16 มีนาคม 2548
เอกสารคู่มือผู้วิจัย	
ประวัติส่วนตัวหัวหน้าโครงการ	- อยู่ในโครงการวิจัย
รายละเอียดทางด้านงบประมาณ ค่าใช้จ่ายให้กับอาสาสมัคร, ค่าใช้จ่ายอื่น ๆ	
เอกสารประชาสัมพันธ์ : (ถ้ามี)	
อื่น ๆ	

กระบวนการพิจารณาโครงการวิจัย : [] ไม่ให้ประชุมคณะกรรมการ

[√] เร่งพิจารณา (Expedited Review)

ผลการพิจารณา

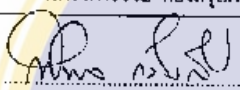
คณะกรรมการจริยธรรมการวิจัย ได้พิจารณาแล้ว เห็นว่าโครงการฯ ดังกล่าว ไม่ขัดต่อสวัสดิภาพ และไม่ก่อให้เกิดภัยอันตรายแก่ผู้ถูกวิจัยแต่ประการใด

จึงเห็นสมควรให้ดำเนินการวิจัยในขอบเขต ที่เสนอได้

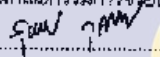
อนุมัติ ณ วันที่ ๒๖ เดือน พฤษภาคม พ.ศ. ๒๕๔๘ มีผลถึงวันที่ ๒๖ เดือน กันยายน พ.ศ. ๒๕๔๘

คำแนะนำ :

- การเปลี่ยนแปลงส่วนใด ๆ ในโครงการวิจัย ต้องจัดทำส่วนปรับปรุงแก้ไขโครงการวิจัย (Amendment) เพื่อขอรับรองจากคณะกรรมการจริยธรรมการวิจัย
- เมื่อเสร็จสิ้นโครงการวิจัย ต้องสรุปผลการวิจัยแจ้งคณะกรรมการจริยธรรมการวิจัย

ลงชื่อ :  (ศาสตราจารย์เกียรติคุณ นายแพทย์กำพล กลั่นกลิ่น)

ประธานคณะกรรมการจริยธรรมการวิจัย

ลงชื่อ :  (ศาสตราจารย์เกียรติคุณ นายแพทย์สุพจน์ วุฒิการณ)

รองศาสตราจารย์ แพทย์ศาสตราจารย์ มหาวิทยาลัยเชียงใหม่



No. 43/2005

Documentary Proof of Ethical Clearance
The Committee on Human Rights Related to
Human Experimentation
Mahidol University, Bangkok

Title of Project: Personal Factors, Maternal Role Adaptation and Postpartum Depression in Primiparous Adolescent Mothers
(Thesis for Master Degree)

Principle Investigator: Miss Somphit Amphai

Name of Institution, Faculty of Nursing

Approved by the Committee on Human Rights Related to Human Experimentation

Signature of Chairman.

(Professor Dr.Srisin Khusmith)

Signature of Head of the Institute.

(Professor Dr. Porfichai Matangkasombut)

Date of Approval. - 6 MAY 2005

APPENDIX C

แบบสอบถามข้อมูลส่วนบุคคล

คำชี้แจง โปรดใส่เครื่องหมาย X ลงใน () หรือเติมคำลงในช่องว่าง ให้ตรงตามความเป็นจริง

1. ปัจจุบันท่านอายุ.....ปี.....เดือน
2. ปัจจุบันสามีของท่านอายุ.....ปี.....เดือน
3. สถานภาพสมรส

☐ คู่ (อยู่ด้วยกันกับสามี)	☐ หม้าย / หย่า / แยก
☐ คู่ (ไม่ได้อยู่ด้วยกันกับสามี)	☐ อื่นๆ ระบุ.....
4. ท่านจบการศึกษาสูงสุดระดับ

☐ ไม่ได้เรียน	☐ ระดับประถมศึกษา	☐ ระดับมัธยมศึกษา
☐ ปวช.	☐ ปวส.	☐ อนุปริญญา
☐ ปริญญาตรี	☐ อื่นๆ ระบุ.....	
5. ปัจจุบันท่านประกอบอาชีพ

☐ ธุรกิจส่วนตัว ระบุ.....	☐ ค้าขาย ระบุ.....
☐ รับจ้าง ระบุ.....	☐ นักเรียน / นักศึกษา
☐ ไม่ได้ประกอบอาชีพ / แม่บ้าน	☐ อื่นๆ ระบุ.....
6. รายได้ของครอบครัว.....บาท / เดือน
(หมายถึง รายได้ของท่านรวมกับสามี หรือรายได้ของคนใด คนหนึ่งในกรณีที่อีกฝ่ายไม่มีรายได้)
7. ความเพียงพอของรายได้ที่ใช้ในแต่ละเดือน

☐ เพียงพอ	☐ ไม่เพียงพอ
----------------------------------	-------------------------------------
8. สมาชิกในครอบครัวของท่านประกอบด้วย

☐ ตัวท่านเอง สามี ลูก
☐ ตัวท่านเอง สามี ลูก บิดา มารดาหรือญาติพี่น้องของฝ่ายใด ฝ่ายหนึ่ง
☐ อื่นๆ ระบุ.....
9. สัมพันธภาพในครอบครัว

☐ ดีมาก ไม่เคยทะเลาะกันเลย	☐ ดี เคยทะเลาะกันบ้าง	☐ ไม่ดี ทะเลาะกันบ่อย
---	--	--
10. ความพร้อมในการมีบุตร

☐ พร้อม เนื่องจาก.....	☐ ไม่พร้อมเนื่องจาก.....
---	---

11. ท่านเคยแทงบุตรหรือไม่

() เคยแทงบุตร.....ครั้ง

() ไม่เคยแทงบุตร

12. ท่านคลอดบุตรคนนี้ด้วยวิธี

() คลอดปกติ

() ใช้เครื่องดูดสุญญากาศ

() ใช้เข็ม

() ผ่าตัดเอาทารกออกจากหน้าท้อง



แบบสอบถามการปรับบทบาทการเป็นมารดาในระยะหลังคลอด

คำชี้แจงในการตอบ

ข้อความต่อไปนี้แสดงถึงการกระทำหรือความรู้สึกของท่านในระยะหลังคลอด ขอให้ท่านอ่านข้อความแต่ละข้ออย่างละเอียด และทำเครื่องหมาย X ลงในช่องที่ตรงกับการกระทำและความรู้สึกของท่านมากที่สุด

ในแต่ละข้อขอให้ท่านเลือกตอบเพียงคำตอบเดียว และกรุณาตอบทุกข้อ โดยใช้เกณฑ์ในการเลือกตอบดังนี้

ไม่เป็นความจริงเลย	หมายถึง	ข้อความในประโยคไม่ตรงกับการกระทำหรือความรู้สึกของท่านเลย
เป็นความจริงบ้างเล็กน้อย	หมายถึง	ข้อความในประโยคตรงกับการกระทำหรือความรู้สึกของท่านเล็กน้อย
เป็นความจริงปานกลาง	หมายถึง	ข้อความในประโยคตรงกับการกระทำหรือความรู้สึกของท่านเพียงครึ่งหนึ่ง
เป็นความจริงส่วนมาก	หมายถึง	ข้อความในประโยคตรงกับการกระทำหรือความรู้สึกของท่านค่อนข้างมากแต่ไม่ทั้งหมด
เป็นความจริงมากที่สุด	หมายถึง	ข้อความในประโยคตรงกับการกระทำหรือความรู้สึกของท่านทั้งหมด

ตัวอย่าง

ข้อความ	ไม่เป็นความจริงเลย	เป็นความจริงบ้างเล็กน้อย	เป็นความจริงปานกลาง	เป็นความจริงส่วนมาก	เป็นความจริงมากที่สุด
1.ฉันคิดว่าลูกของฉันน่ารัก					X

หมายความว่า ท่านคิดว่าลูกของท่านน่ารัก และตรงกับความรู้สึกของท่านทั้งหมด

ข้อความ	ไม่เป็น ความจริงเลย	เป็น ความจริงบ้าง เล็กน้อย	เป็น ความจริง ปาน กลาง	เป็น ความจริง ส่วนมาก	เป็นความ จริงมาก ที่สุด
1. ฉันดีใจที่มีลูกคนนี้					
2. ฉันรักลูกคนนี้อย่าง.....					
3. ฉันรู้สึกพอใจในหน้าตาของลูก					
4. ฉันรู้สึกหงุดหงิดเวลาที่.....					
5. ลูกเป็นคนอีกคนหนึ่ง.....					
6. ฉันไม่เคยปล่อยให้ลูก.....					
7. ฉันคิดว่าลูก.....					
8. ฉันเต็มใจทำ.....					
9. ฉันดูแลให้ลูก.....					
10. ฉันได้ลมให้ลูก.....					
11. ฉันดูแลให้ลูกได้.....					
12. ฉันสามารถอาบน้ำ.....					
13. ฉันดูแลทำความสะอาด.....					
14. ฉันใส่เสื้อผ้าให้ลูก.....					
15. ฉันป้องกันการติดเชื้อ.....					
16. ฉันป้องกันอันตราย.....					
17. ฉันอุ้มหรือป้อนโยน.....					
18. ฉันสามารถบรรเทาความ.....					
19. ฉันรู้ความต้องการของลูก.....					
20. ฉันมั่นใจว่าจะเลี้ยงลูก.....					
21. ฉันรู้สึกว่าลูกอบอุ่น.....					
22. ฉันรู้สึกพอใจที่ลูกตัวโตขึ้น					
23. ฉันรู้สึกท้อแท้ที่ไม่สามารถ.....					
24. ฉันภูมิใจที่สามารถเลี้ยงลูก.....					
25. ฉันภูมิใจที่สามารถดูแลลูก.....					

ข้อความ	ไม่เป็น ความจริงเลย	เป็น ความจริงบ้าง เล็กน้อย	เป็น ความจริง ปาน กลาง	เป็น ความจริง ส่วนมาก	เป็นความ จริงมาก ที่สุด
26. สามีหรือญาติพี่น้องมักชมว่า.....					
27. ถ้าให้คนอื่นเลี้ยงลูกอาจเลี้ยงได้ดี.....					
28. ฉันมักจะแนะนำลูกคนนี้กับญาติ					
29. ฉันพยายามให้สามีอุ้มและ.....					
30. ฉันรู้สึกพอใจเมื่อญาติๆ เข้ามามีส่วน.....					
31. ฉันและสามียังรักและเข้าใจกัน.....					
32. แม้ว่าฉันจะต้องเลี้ยงลูก					
33. ฉันยังมีความสุขทางเพศ.....					
34. ฉันสามารถขอให้สามีช่วย.....					

เครื่องมือวัดภาวะซึมเศร้า

คำชี้แจงในการตอบ

ข้อความต่อไปนี้เป็นความรู้สึกที่อาจจะเกิดขึ้นกับท่าน ขอให้ท่านพิจารณาว่าในรอบ สัปดาห์ที่ผ่านมา ท่านมีความรู้สึกตามข้อความเหล่านี้หรือไม่ ขอให้ท่านอ่านข้อความแต่ละข้ออย่างละเอียด แล้วใส่เครื่องหมาย X ลงในช่องที่ตรงกับความรู้สึกของท่านมากที่สุด

ในแต่ละข้อขอให้ท่านเลือกตอบเพียงคำตอบเดียว และกรุณาตอบทุกข้อโดยใช้เกณฑ์ในการเลือกตอบดังนี้

ไม่เลย	หมายความว่า	ความรู้สึกนั้นเกิดขึ้นน้อยกว่า 1 วันใน 1 สัปดาห์
นาน ๆ ครั้ง	หมายความว่า	ความรู้สึกนั้นเกิดขึ้น 1-2 วันใน 1 สัปดาห์
ค่อนข้างบ่อย	หมายความว่า	ความรู้สึกนั้นเกิดขึ้น 3-4 วันใน 1 สัปดาห์
บ่อยครั้ง	หมายความว่า	ความรู้สึกนั้นเกิดขึ้น 5-7 วันใน 1 สัปดาห์

คำตอบเหล่านี้ ไม่มีถูก ไม่มีผิด แต่เป็นเพียงการทดสอบเกี่ยวกับความรู้สึกของท่านเท่านั้น

ความรู้สึก	ไม่เลย (น้อยกว่า 1 วัน)	นาน ๆ ครั้ง (1-2 วัน)	ค่อนข้างบ่อย (3-4 วัน)	บ่อยครั้ง (5-7 วัน)
1.ฉันรู้สึก.....				
2.ฉันรู้สึกเบื่อ.....				
3.ฉันรู้สึกว่า ฉันไม่.....				
4.ฉันรู้สึกว่า ตนเอง.....				
5.ฉันรู้สึกลำบากใน.....				
6.ฉันรู้สึก.....				
7.ฉันรู้สึกว่า ทุกๆสิ่ง.....				
8.ฉันรู้สึกมีความหวัง.....				

ความรู้สึก	ไม่เคย (น้อยกว่า 1 วัน)	นาน ๆ ครั้ง (1-2 วัน)	ค่อนข้างบ่อย (3-4 วัน)	บ่อยครั้ง (5-7 วัน)
9.ฉันคิดว่าชีวิตฉันมี.....				
10.ฉันรู้สึก.....				
11. ฉันนอน.....				
12.ฉันมี.....				
13.ฉันพูดคุย.....				
14.ฉันรู้สึกอ้างว้าง.....				
15.ผู้คนทั่วไปไปไม่มีความ.....				
16.ฉันรู้สึกว่าชีวิต.....				
17.ฉันมัก.....				
18.ฉันรู้สึก.....				
19.ฉันรู้สึกว่าผู้คนรอบข้าง.....				
20. ฉันรู้สึกท้อถอย.....				

APPENDIX D

Testing assumptions of multiple regression analysis

The assumptions underlying the multiple regression analysis were checked before conducting an analysis. The results for each assumption were presented as follows:

1. Normal distribution

Using histograms to assess the normal distribution of dependent variables and independent variables. On postpartum depression scores, maternal role adaptation scores, and family income, normal distributions were shown (Figure 3).

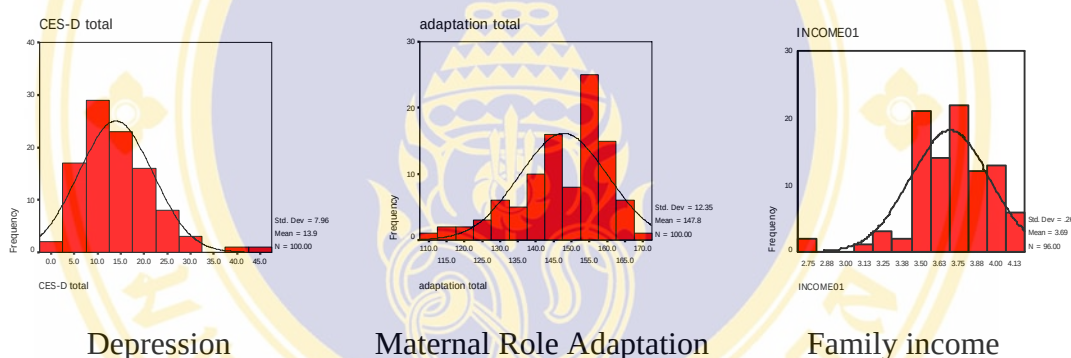


Figure 3 Normal distribution

Using the Kolmogorov-Smirnov goodness of fit test, the normal distribution of each variable was tested. If the Kolmogorov-Smirnov goodness of fit test yields a significance level of less than 0.05, it means that the distribution is probably not normal (Vaus, 2002). According to Table 6, the scores of postpartum depression and maternal role adaptation were normally distributed.

	CES-D total	adaptation total	Family income
Kolmogorov-Smirnov Z	.960	1.344	1.250
Asymp. Sig. (2-tailed)	.315	.054	.088

Table 6 One-Sample Kolmogorov-Smirnov Test of this study

Examine the Skewness and Kurtosis statistics for the distribution. A normal distribution is symmetrical. A nonsymmetrical distribution is described as being either positively or negatively skewed. When a distribution is represented as a histogram its skewness can be seen in the shape of the graph. A negatively skewed distribution is one in which the long tail of the distribution is to the left (towards the lower values on the horizontal axis). A positively skewed distribution has the long tail on the right side (high values) on the horizontal axis. The skewness statistic is negative if the distribution is negatively skewed, positive if positively skewed and zero if it is symmetrical (Vaus, 2002).

2. Linearity and Homoscedasticity

Linearity and Homoscedasticity can be examined using a scatterplot of the two variables. The standardized predicted values are plotted against observed values. In the sample, the relation between the dependent variable and independence is linear, the distribution is roughly normal (although there is a slight deficiency of residuals exactly on zero) (Field, 2004). The straight line in this plot represent a normal distribution, and the points represent the observed residuals. A perfectly normally distributed data set, all points will lie on the line. (Figure 4)

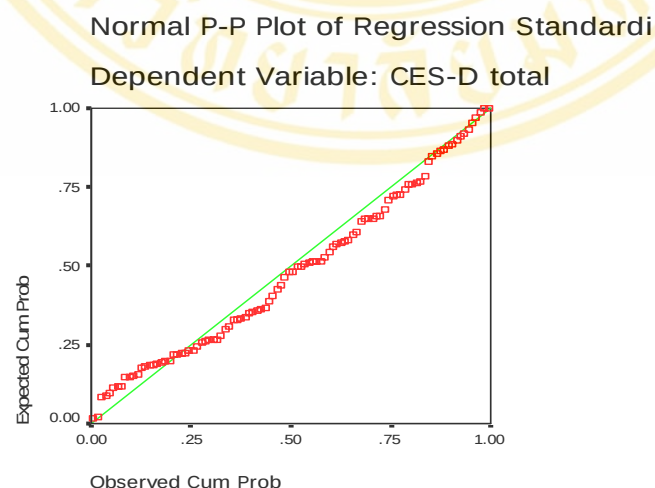


Figure 4 Linearity of the relationship between postpartum depression and Independent variables

The plots of standardized residuals against standardized predicted values, the point are randomly and evenly dispersed throughout the plot. This pattern is indicative of a situation in which the assumptions of linearity and homoscedasticity have been met. In the sample, the residuals form a straight line from the lower-left corner to the upper-right corner. The plotted values fall close to line in the normal probability plot. (Figure 5)

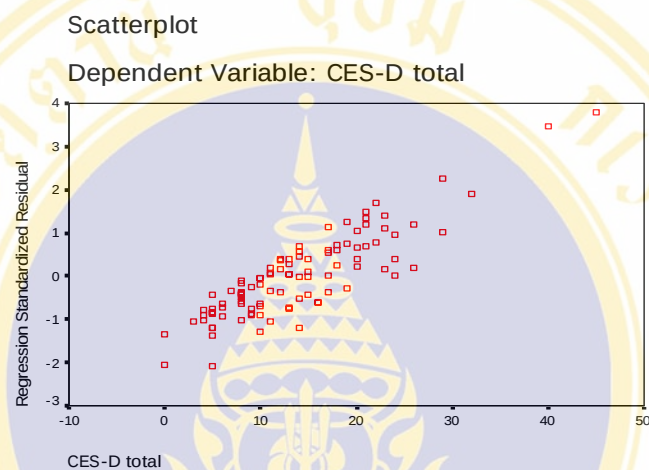


Figure 5 Scatter plot of the relationship between predicted and residual postpartum depression scores

In the sample, the residuals form a normal distribution, the plotted values vary around the prediction line, but in general they cluster fairly close to the line. (Figure 6)

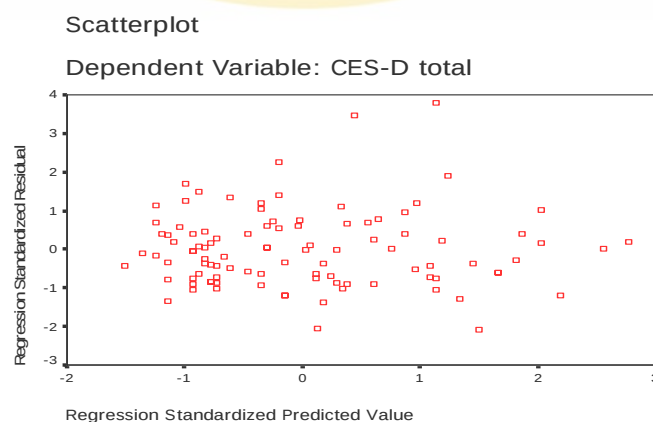


Figure 6 Scatter plot of the residuals form a normal distribution

3. Autocorrelation

The autocorrelation was tested by the Durbin-Watson test. If Durbin-Watson value was nearly 2 or between 1.5 and 2.5 indicate that no autocorrelation (Vanichbuncha, 2005). Thus the result statistics was 2.5, indicated no autocorrelation.

4. Multicollinearity

The correlation coefficients among predictive variables, Tolerance and Variance inflation factor (VIF) were used for collinearity test. The correlation coefficients were as or above .85 (Munro, 2001 cite in Niratttharadorn, 2005), Tolerance values were nearly zero or less than 0.2, or Variance inflation factors values were more than 4 (Vanichbuncha, 2005) indicated evidence of multicollinearity. The result of multicollinearity testing found that the correlation coefficients were in range between -.277 to .323. Thus the assumption of multicollinearity was accepted.

APPENDIX E

จำนวนและร้อยละของคะแนนการปรับตัวต่อบทบาทการเป็นมารดาจำแนกเป็นรายข้อ (N = 100)

1. Child acceptance

ข้อความ	จำนวนและร้อยละ				
	ไม่เป็นความจริงเลย	เป็นความจริงบ้างเล็กน้อย	เป็นความจริงปานกลาง	เป็นความจริงส่วนมาก	เป็นความจริงมากที่สุด
1. ฉันดีใจที่มี.....	-	1	8	21	70
2. ฉันรักลูกคนนี้ของฉันไม่ว่าเขาจะเป็น.....	-	1	2	17	80
3. ฉันรู้สึกพอใจใน.....	-	2	2	17	79
4. ฉันรู้สึกหงุดหงิด.....	9	44	31	11	5
5. ลูกเป็นคนอีกคนหนึ่งที่มีชีวิตจิตใจ.....	1	2	9	22	66
6. ฉันไม่เคยปล่อยให้ลูกอยู่.....	3	6	4	19	68
7. ฉันคิดว่าลูกจำเป็นต้อง.....	-	1	3	6	90

2. Childcare competence

ข้อความ	จำนวนและร้อยละ				
	ไม่เป็นความจริงเลย	เป็นความจริงบ้างเล็กน้อย	เป็นความจริงปานกลาง	เป็นความจริงส่วนมาก	เป็นความจริงมากที่สุด
8. ฉันเต็มใจทำทุกอย่าง.....	-	-	3	17	80
9. ฉันดูแลให้ลูกได้กินนม.....	-	1	2	18	79
10. ฉันได้ล่อมให้ลูกเธอ.....	2	1	14	34	49
11. ฉันดูแลให้ลูกได้นอนหลับ.....	-	-	2	18	80
12. ฉันสามารถอาบน้ำ.....	-	4	9	26	61
13. ฉันดูแลทำความสะอาดร่างกาย.....	-	3	18	39	40

2. Childcare competence (ต่อ)

ข้อความ	จำนวนและร้อยละ				
	ไม่เป็นความจริงเลย	เป็นความจริงบ้างเล็กน้อย	เป็นความจริงปานกลาง	เป็นความจริงส่วนมาก	เป็นความจริงมากที่สุด
14.ฉันใส่เสื้อผ้าให้ลูกได้เหมาะสม.....	-	1	8	23	68
15. ฉันป้องกันการติดเชื้อ.....	7	2	12	31	54
16. ฉันป้องกันอันตรายที่จะเกิด.....	-	-	7	26	67
17. ฉันอุ้มหรือป้อนโยนให้ลูกเงียบ.....	1	3	13	39	44
18. ฉันสามารถบรรเทาความ.....	1	2	14	47	36
19. ฉันรู้ความต้องการของลูก.....	-	3	24	37	36
20. ฉันมั่นใจว่า.....	-	2	9	22	67

3. Evaluation of childcare success

ข้อความ	จำนวนและร้อยละ				
	ไม่เป็นความจริงเลย	เป็นความจริงบ้างเล็กน้อย	เป็นความจริงปานกลาง	เป็นความจริงส่วนมาก	เป็นความจริงมากที่สุด
21. ฉันรู้สึกที่ลูกอบอุ่นและสุขสบายเมื่อฉันอุ้ม สัมผัส.....	-	-	4	17	79
22. ฉันรู้สึกพอใจที่ลูกตัวโตขึ้น และรู้เรื่องมากขึ้น เช่น	-	-	2	11	87
23. ฉันรู้สึกท้อแท้ที่ไม่สามารถทำให้ลูกหยุดร้องไห้.....	27	17	24	21	11
24. ฉันภูมิใจที่สามารถเลี้ยงลูกได้ด้วย.....	-	1	3	24	72
25.ฉันภูมิใจที่สามารถดูแล.....	-	-	7	23	70
26. สามหรือญาติพี่น้องมักชมว่าฉันเลี้ยงลูก.....	3	9	27	40	21
27. ถ้าให้คนอื่นเลี้ยงลูกอาจเลี้ยง.....	58	12	15	10	5

4. Reorganization of family relationship

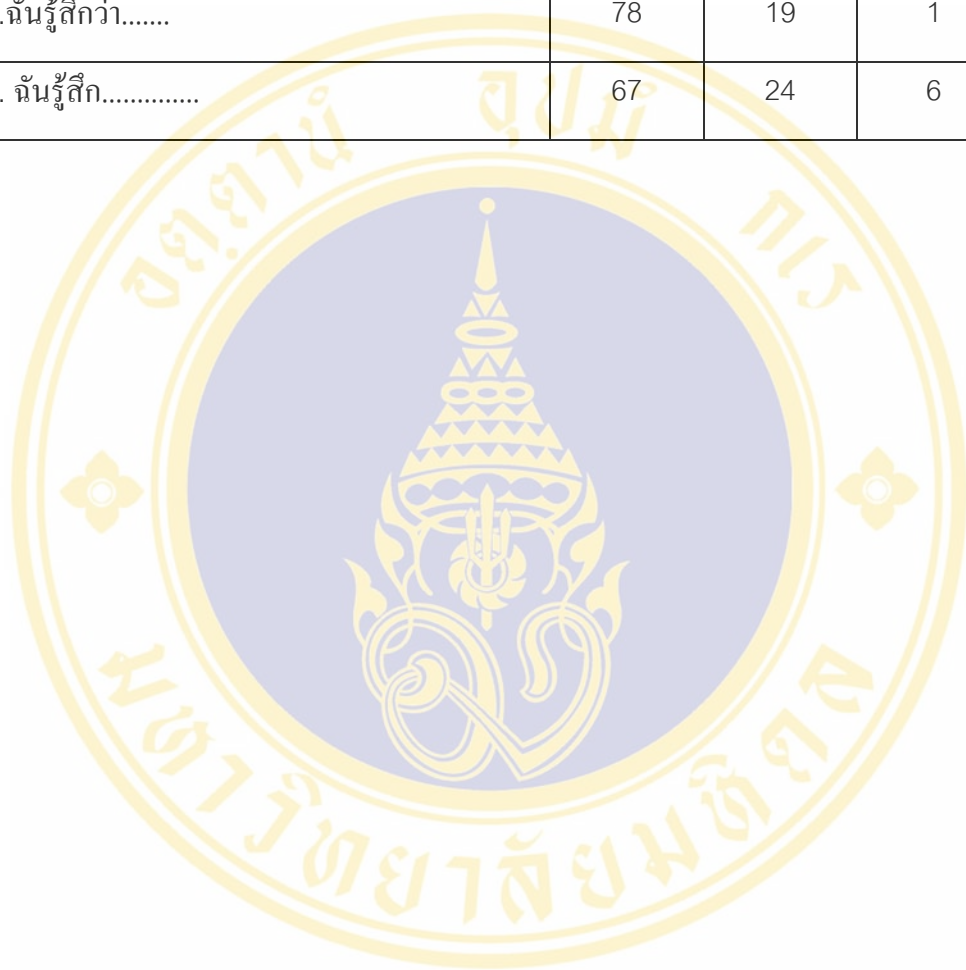
ข้อความ	จำนวนและร้อยละ				
	ไม่เป็นความจริง เลย	เป็นความจริงบ้าง เล็กน้อย	เป็นความจริงปาน กลาง	เป็นความจริง ส่วนมาก	เป็นความจริงมาก ที่สุด
28. ฉันมักจะแนะนำลูกคนนี้ และ.....	3	6	16	39	36
29. ฉันพยายามให้สามีอุ้มและ.....	2	1	5	22	70
30. ฉันรู้สึกพอใจเมื่อญาติๆ เข้ามาการ.....	-	3	13	30	54
31. ฉันและสามียังรักและ.....	2	2	9	25	62
32. แม้ว่าฉันจะต้องเลี้ยงลูก	2	6	19	33	40
33. ฉันยังมีความสุข.....	5	14	30	30	21
34. ฉันสามารถขอให้สามีช่วยเหลือลูก.....	2	8	20	25	45

จำนวนและร้อยละของคะแนนภาวะซึมเศร้าจำแนกเป็นรายข้อ (N = 100)

ความรู้สึก	จำนวนและร้อยละ			
	ไม่เคย (น้อยกว่า 1วัน)	นาน ๆ ครั้ง (1-2 วัน)	ค่อนข้าง บ่อย (3-4 วัน)	บ่อยครั้ง (5-7 วัน)
1.ฉันรู้สึก.....	27	55	15	3
2.ฉันรู้สึก.....	41	36	16	7
3.ฉันรู้สึกว่า ฉันไม่สามารถ.....	62	25	11	2
4.ฉันรู้สึกว่า ตนเองมี.....	18	41	26	15
5.ฉันรู้สึกลำบาก.....	39	45	15	1
6.ฉันรู้สึก.....	48	38	10	4
7.ฉันรู้สึกว่า ทุกๆสิ่งที.....	75	21	4	-
8.ฉันรู้สึกมีความหวัง.....	14	27	31	28
9.ฉันคิดว่าชีวิตฉันมี.....	68	24	6	2
10.ฉันรู้สึก.....	59	30	9	2
11. ฉันนอน.....	39	47	12	2
12.ฉันมี.....	5	7	38	50
13.ฉันพูดคุย.....	49	40	9	2
14.ฉันรู้สึก.....	63	30	6	1
15.ผู้คนทั่วไป.....	76	13	4	7
16.ฉันรู้สึกว่าชีวิตนี้.....	6	29	29	36
17.ฉันมัก.....	52	32	10	6

จำนวนและร้อยละของคะแนนภาวะซึมเศร้าจำแนกเป็นรายข้อ (N = 100) (ต่อ)

18. ฉันรู้สึก.....	60	30	6	4
19. ฉันรู้สึกว่า.....	78	19	1	2
20. ฉันรู้สึก.....	67	24	6	3



APPENDIX F
List of Experts for Validator of
the Maternal Role Adaptation Instrument

1. Associated Professor. Dr.Nittaya Sinsuksai
Faculty of Nursing, Mahidol University
2. Associated Professor. Dr. Atirat Wattanaphirin
Faculty of Nursing, Mahidol University
3. Associated Professor. Dr. Dittakarn Boriboonhirunsarn
Faculty of Medicine, Mahidol University
4. Associated Professor. Dr. Srisamorn Phumonsakul
Faculty of Medicine, Mahidol University
5. Associated Professor. Supranee Attaseri
Faculty of Nursing, Srinakharinwirot University

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