RELATIONSHIPS AMONG PERSONAL FACTORS, SOCIAL SUPPORT, PERCEPTION OF MATERNAL COMPETENCE, PERCEPTION OF NEWBORN BEHAVIORS AND MATERNAL ROLE ADAPTATION OF POSTPARTUM MOTHERS.

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The purpose of this descriptive research was to investigate the relationships among personal factors, social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation of postpartum mothers. Roy adaptation theory was used to guide the study. The purposive sample consisted of one hundred and fifty of the first time mothers who attended the family planning clinic at Ramathibodi hospital. All data were collected using five questionnaires which addressed personal factors, maternal role adaptation, perception of newborn behaviors, perception of maternal competence, and postpartum social support for each mother. Data were analysed by using the SPSS/FW Version 7.5 program. Results revealed that the incidence of maternal role adaptation was relatively well. Age, years of education, social support, perception of maternal competence, perception of newborn behaviors were significantly correlated with maternal role adaptation of postpartum mothers. Age, social support, and perception of maternal competence explained 16.4 percent of variance of maternal role adaptation of postpartum mothers scores with statistical significance.

The results of this study, were recommended for nursing practice that nurses should encourage families to provide support and understanding to the first-time mothers throughout this difficult experience in order to adapt to maternal role easily and effectively.

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ศุภกาญจน์ สิริกรรณะ : ความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล การสนับสนุนทางสังคม การรับรู้ความสามารถในการเป็นมารดา และการรับรู้พฤติกรรมทารกแรกเกิด กับการปรับตัวด้านบทบาทหน้าที่ของมารดาในระยะหลังคลอด (RELATIONSHIPS AMONG PERSONAL FACTORS, SOCIAL SUPPORT, PERCEPTION OF MATERNAL COMPETENCE, PERCEPTION OF NEWBORN BEHAVIORs AND MATERNAL ROLE ADAPTATION OF POSTPARTUM MOTHERS) คณะกรรมการควบคุมวิทยานิพนธ์: พรทิพย์ วงศ์วิเศษสิริกุล,พย.ด., ยุวดี ภาชา, กศ.ด. 107 หน้า. ISBN 974-663-833-5

การศึกษาครั้งนี้เป็นการวิจัยเชิงบรรยายเพื่อศึกษาความสัมพันธ์ระหว่างปัจจัยส่วนบุคคล การสนับสนุนทางสังคม การรับรู้ความสามารถในการเป็นมารดา และการรับรู้พฤติกรรมทารกแรกเกิด กับการปรับตัวด้านบทบาทหน้าที่ของมารดาในระยะหลังคลอด และศึกษาอำนาจการทำนายการปรับตัวด้านบทบาทหน้าที่ของมารดาในระยะหลังคลอด ภายใต้กรอบทฤษฎีการปรับตัวของรอย กลุ่มตัวอย่างคือมารดาที่มีบุตรคนแรกในระยะหลังคลอด 4-6 สัปดาห์ มาตรวจที่โรงพยาบาลรามาธิบดี ระหว่าง 23 มีค.- 8 มิย. 2542 จำนวน 150 ราย เก็บรวบรวมข้อมูลโดยใช้แบบสอบถามจำนวน 5 ชุดคือ แบบสอบถามปัจจัยส่วนบุคคล การปรับตัวด้านบทบาทหน้าที่ของมารดาในระยะหลังคลอด การรับรู้พฤติกรรมทารกแรกเกิด การรับรู้ความสามารถในการเป็นมารดา และการสนับสนุนทางสังคมในระยะหลังคลอด วิเคราะห์ข้อมูลโดยใช้โปรแกรมสำเร็จรูป SPSS/FW Version 7.5 ผลการวิจัยพบว่ากลุ่มตัวอย่างมีการปรับตัวด้านบทบาทหน้าที่โดยรวมอยู่ในระดับดี อายุ ระยะเวลาในการศึกษา การสนับสนุนทางสังคม การรับรู้ความสามารถในการเป็นมารดา การรับรู้พฤติกรรมทารกแรกเกิด มีความสัมพันธ์กับ การปรับตัวด้านบทบาทหน้าที่ของมารดาในระยะหลังคลอด อย่างมีนัยสำคัญทางสถิติ ปัจจัยที่สามารถทำนายการปรับตัวด้านบทบาทหน้าที่ของมารดาในระยะหลังคลอด ได้แก่อายุ การสนับสนุนทางสังคม และการรับรู้ความสามารถในการเป็นมารดา โดยสามารถร่วมกันอธิบายความแปรปรวนของการปรับตัวด้านบทบาทหน้าที่ของมารดาในระยะหลังคลอดได้ร้อยละ 16.4 อย่างมีนัยสำคัญทางสถิติ

จากผลการวิจัยนี้แสดงว่ามารดาหลังคลอดที่มีอายุมากขึ้น มีการสนับสนุนทางสังคมดีและมีการรับรู้ความสามารถในการเป็นมารดาที่ดี จะสามารถปรับตัวด้านบทบาทหน้าที่ในระยะหลังคลอดได้ดีขึ้น ผู้วิจัยจึงมีข้อเสนอแนะว่าพยาบาลควรส่งเสริมให้บุคคลใกล้ชิดของมารดาที่มีบุตรคนแรกในระยะหลังคลอดให้การสนับสนุนและให้การช่วยเหลือ และให้คำปรึกษา แนะนำ รวมถึงการให้ข้อมูลข่าวสาร แก่มารดาในระยะหลังคลอด อันเป็นการส่งเสริมการรับรู้ความสามารถในการเป็นมารดาที่ดีและมีการปรับตัวด้านบทบาทหน้าที่ในระยะหลังคลอดได้อย่างถูกต้อง

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CHAPTER I

INTRODUCTION

Background and Rationale

The most significant role of women in society is mainly found in maternal role identity (Young, 1986: 259-272; Grace, 1993:431-439). Because of women are determined to handle with child bearing task as well as making an effort on offering care, love and pay a special attention for properly growth and development of their children until they become a quality people. Mercer (1981: 73-77) explained that the maternal role identity would start since the stage of pregnancy and then continually developed to reach the delivery stage. Interestingly, the function of maternal role was obviously seen at the post-delivery stage. Especially in the first time mothers needed to regulate their role function in order to engage a new task; child care, as well as to meet social and self-expectation. From previous study revealed that 25% of sample group of mothers had been facing with difficulty regarding self-adaptation because they were lacking of maternal identity experience including their weak physical condition during postpartum period (Curry, 1983: 115-121).

The role function adaptation was explained in Roy's theory as an unavoidable duty of individuals in a unit of society (Andrew & Roy, 1991: 348-349). Each role existed in relationship to another, person needed to know who they were (the role

occupied) and associated with social expectations so that they could act appropriately. Person needed to perceive and understand in his or her role which enable to bring about a proper behaviors. Particularly, while mothers had her own primary role, they should play a secondary role as well. Role mastery was a goal of role adaptation that met social expectations, healthy physical ability and subjective well being. Subjective well being behaviors involved the feeling and attitudes about her role performance. Thus, maternal role adaptation in the first-time mothers during postpartum period was a critical role transitional point (Walker, et al., 1986b: 352-355). Maternal role adaptation was a hardship role performance of the first-time mothers because they had to learn it for approval and successful role behaviors. Le Master (1959: 352-355) found that thirty-eight out of the forty-six couples (83%) reported "extensive" or "severe" action to deal with the first child of family .

It could be seen that maternal role adaptation in the first-time mother was widely accepted as a permanent role. Maternal behavior was not only initiated from human instinct but also associated with such the accumulate experiences gradually gained from socialization, emotional maturity, opinion, social values and lay persons (Steel & Pollock, 1968 cited by Jenson & Bobak, 1985: 776). First time mothers needed to learn and perceive a sufficient and correct knowledge for a particular purpose on maternal role adaptation. Since, a learning skill in maternal role function could be widely and systematically developed by using both a direct and an indirect methods under a complicated and intellectual procedures (Rubin, 1967 cited by Mercer, 1981: 73; Rubin, 1967a: 237-245). However, a practice on maternal role

requires a special relationship and interaction with the other person as well, which implied that the mothers should integrated the instinctive recognition, personality and mind resulted in progress of her learning skill (Rubin, 1967b: 324-346). During postpartum period, mothers should integrate their responsibilities such as child care and housewife task as well. Regarding to the maternal role identity particularly in child care performance, thus an excellent relationship had to be intentionally given to children with a further self-adaptation for practicing on food feeding, bathing, embracing and holding babies with sincere love including try to understand whatever children's behaviors and appropriately responded their needs (Reeder, et al, 1983: 619 ; Jensen & Bobak, 1985: 646-647 ; Mercer, 1985: 198-204). Martin and others (1980: 421) found that if mothers could do well on maternal role adaptation, the mothers would be capable to conduct child care activity effectively and their children would receive appropriate care and attention as well. On the other hand, if mothers could not suitably adjust themselves, obstacles or problems related to child-rearing task might be occurred. However, the most common problems usually facing by children were a lack of distinct attention given by their mothers then following by an unsatisfied phenomenon of growth retardation (Cropley, 1979: 14-15). In term of housewife role, mothers had to adjust themselves in maintaining the quality of family relationship including social activity involvement with a particular aim to remain the unity which was considered as a fundamental factors leading to the formation of a firm family unit. Because when a mother having a child, certainly her daily activities were automatically changed both in term of housekeeping workload and interaction or helping with the family members in various activities (Jensen & Bobak, 1985: 817).

Accordingly, if mothers could adapt themselves, they would be happy and proud to take a role of housewife as well. In contrast, if mothers could not adapt themselves, thus they might feel so stressful and anxious with their role performance (Fawcett, 1981: 372-376).

Consequently, the capability of mothers in maternal role adaptation was considered as relying on role expectation of the mothers and their society (Sarbin & Allen, 1968). However, such role adaptation would be adopted on the basis of learning attainment of mothers. Then, the assessment on perception of maternal competence became a significant process for measuring their knowledge and skill in maternal role performance and perception of newborn behaviors (Erickson, 1976, 73-76: Bullock & Pridham 1988, 321-329). Absolutely, a good mother had to understand and be able to provide her children with holistic response and appropriate management on various concerned activities (Jensen & Bobak, 1985).

Eventually, all mothers wished to give the best treat to their children, however the researcher's experience showed that most of the first-time mothers seem to be unavoidable to encounter with many problems such as newborn nursing, lack of knowledge and understanding on infant cues including the health personal advice during postpartum period in the hospitals. These evidences affect to the mothers in child-rearing responsibility when they were back home. The study by Pleshette and others (1956 cited by Hall, 1980: 318) indicated that 50 % of the primiparas had wanted to go back to the hospitals again after they were discharged and being

practicing postpartum recuperation at their homes because of feeling of anxiety in nursing their babies. Robson and Moss (1970: 979) found that the primiparous always lacked of knowledge and experience in child nurturing performance, for examples, they could not communicated and understood the infants cues. It might be because of mothers had never recognized what were the real needs and behaviors of infants such as in term of feeding, crying and sleeping etc. (Adams, 1963: 75-76). As a result, all mothers have to make clearer understanding of the infants' behaviors for capability of responding on their needs.

Interestingly, social support is another significant factor that might be facilitating mothers to achieve maternal role adaptation. From the study conducted by Mercer (1981: 73-77) had demonstrated that if mothers had been given with aid and support from their social network, it was very helpful for them in maternal role attainment as well as to feel more certainty and security in taking maternal role since the early period of pregnancy up to postpartum period. Similarly, the study by other researchers (Zahr, et al., 1991: 279-286 ; Mercer 1986a: 9-32) discovered that a sufficient social support given to mothers had affected in reducing stress and tension, having a better self-control, capable to find correct solution, having more confidence to provide care-taking to infants and finally to bring about their appropriate maternal role adaptation. The results of Reece's study (1993: 91-98) showed that a realization of mothers in the significance of active cooperation and supports given by their parents, friends, relatives, health personnel including neighbors, would created to maternal role adaptation. In conclusion social support encouraged mothers to be more

confidence on their performance and satisfaction towards infant care-taking including to gain particularly a positive experience for better practicing such a new role (Cronenwett, 1985a: 93-99)

Accordingly, a perception of maternal competence, perception of newborn behaviors and social support were considered as significant factors affecting to the capability of the first time mothers in maternal role adaptation and in providing effective care-taking to their babies. However, there are other factors effect on mothers capability, such as years of education, family income, infant care experience, readiness to have a baby and type of labors. These factors would be study in this study.

By the mentioned conceptualization, the researcher paid a special attention to study the relationship among personal factors, social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation of postpartum mothers by using Roy Adaptation Theory as a framework.

Theoretical Framework of the Study

The Roy Adaptation Model describes three classes of stimuli bonding to environmental factors (Roy, 1984b cited by Roy, 1999: 38). The focal stimuli of the internal or external stimulus are most immediately confronting the self-adaptive system. Contextual stimuli are all other stimuli present in the situation that contribute to the effect of the focal stimulus. Residual stimuli are environmental factors within or

without self-systems, the effects of which are unclear in the current situation. The instrumental behaviors are normally physical actions and usually have a long term orientation. The expressive behaviors are emotional in nature and result from interactions which enable the person to express these role related feelings is an appropriate manner. Such the mechanism are *Regulators* and *Cognator mechanisms.* Regulator mechanism will automatically respond through the four cognitive-emotive channels : cognitive and information processing, learning, judgment and emotion. With the regulator mechanism, internal and external stimuli including psychological and physiological factors acted as inputs to the cognator mechanism. The complex relationships within and between the two dimensions of the individual system and a group system would illustrate the holistic nature of human as adaptive systems which in turn produced behavioral response relative to the physiology, self-concept or group identity, role function, and interdependence mode for individual and groups.

Regarding to the four major modes of adaptive behaviors as mentioned above, the reflex of such a proper or proper adaptive manner of individuals was introduced with a consideration placed at the outputs of adaptive competence as which could be identified into 2 aspects; 1) *Effective Adaptation Behavior* that helped to promote physio-psychosocial stability and 2) In*effective Adaptation Behavior* that produced an obstruction to physio-psychosocial stability. However, a reverse procession would be automatically started and then following by the further occurrence of appropriate self-adaptation (Andrews & Roy, 1991: 5-53). Roy described a person as a self-regulator mechanism which always having a crucial interaction with dynamic environments.

Additionally, physio-psychological status and ways of living of the first time mothers during postpartum period were absolutely changed as well as their role functions. Being the first-time mothers were conceived as a focal stimuli facing by individuals which could be directly influencing to their adaptation competence. Nevertheless, adaptation competency of the first-time mothers would be based on many concerned components such as contextual stimuli which mentioned in Roy's theory. These influential factors were composed of age, years of education, family income, infant care experience, readiness to have a baby and type of labors, social support, perception of maternal competence and perception of newborn behaviors. Undoubtedly, different characteristics of each mother which was accepted as a focal stimuli certainly had directly resulted in either promotion or obstruction of maternal role adaptation of the postpartum mothers . In other words, the application of adaptive mechanism would be naturally conducted by the first-time mothers of both regulator mechanism and cognator mechanism. Thus the maternal role adaptation would be precisely presented as shown in figure 1.

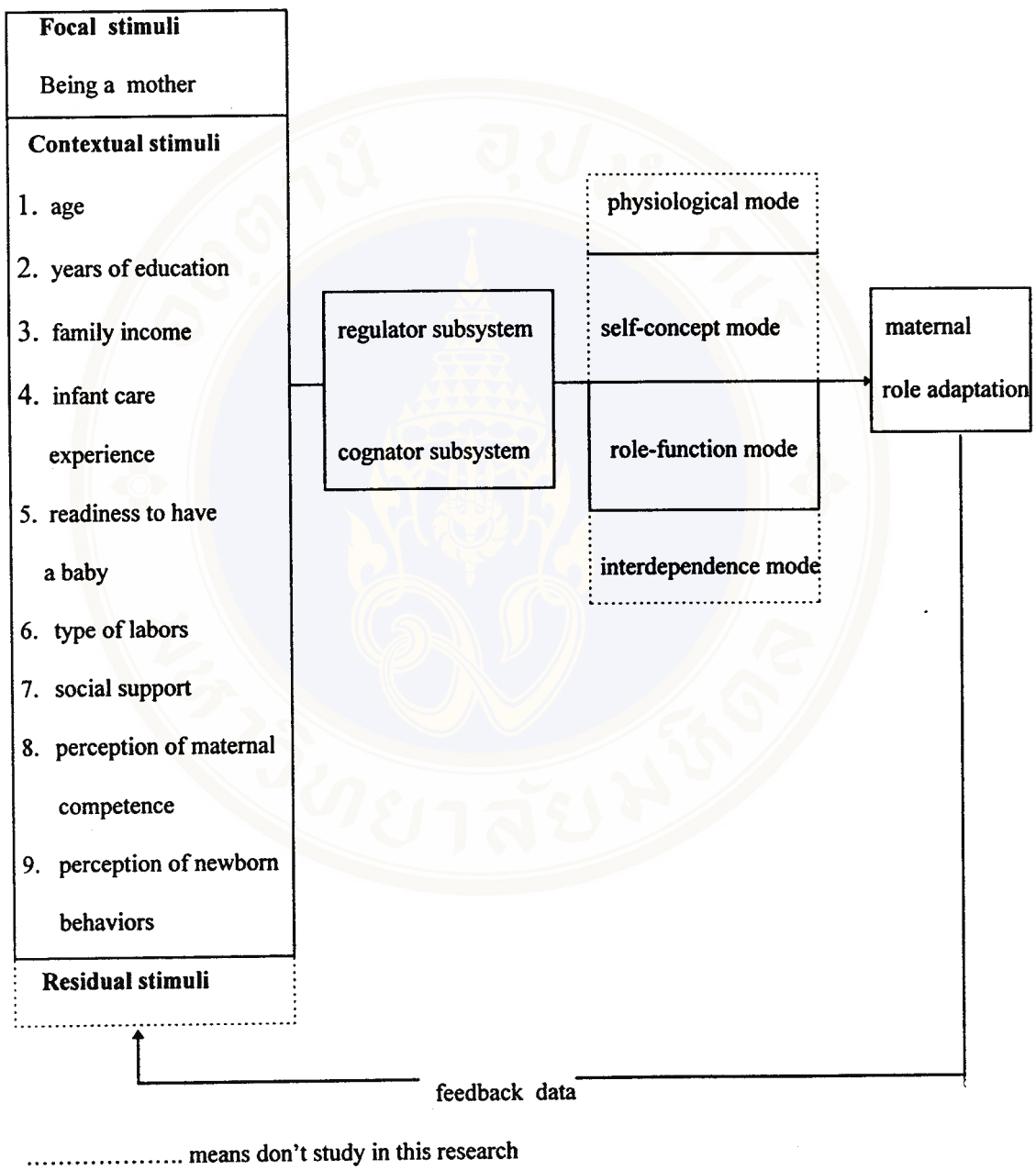


Figure 1 : Conceptual framework in this research from Roy Adaptation Model.

(Roy & Roberts, 1981: 58)

In otherwise the relationships among variables in this research were depicted in figure 2.

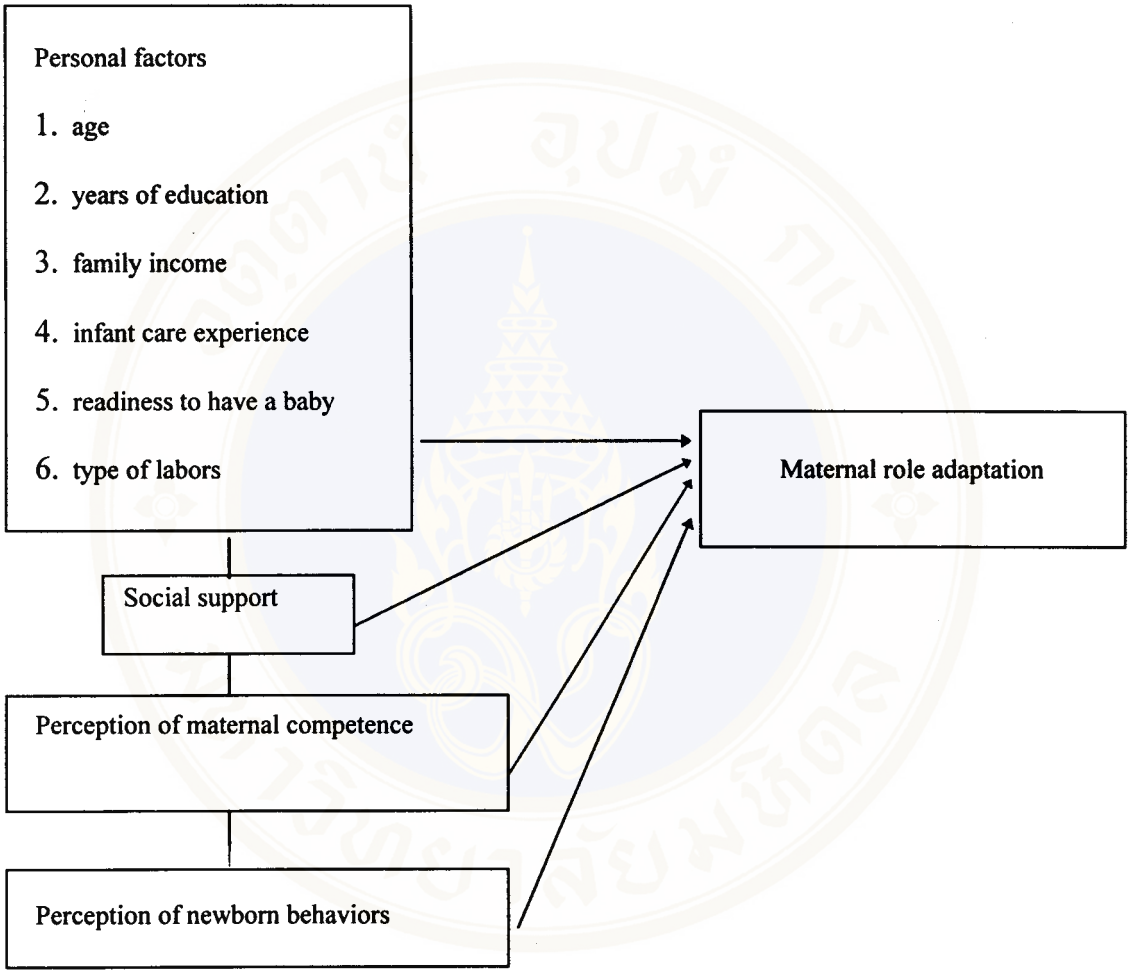


Figure 2: The relationships among variables in this study.

Research Questions

1. What were the features of social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation of the postpartum mothers ?

2. How were the relationships among the personal factors, social support, perception of maternal competence, and perception of newborn behaviors and maternal role adaptation of the postpartum mothers ?

3. What were the predictors of maternal role adaptation ?

Objectives of the Study

1. To study social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation of the postpartum mothers.

2. To investigate the relationships among personal factors, social support, perception of maternal competence and perception of newborn behaviors toward the maternal role adaptation of the postpartum mothers.

3. To examine the predictability of personal factors, social support, perception of maternal competence and perception of newborn behaviors on maternal role adaptation of postpartum mothers.

Research Hypotheses

1. There were relationships among personal factors, social support, perception of maternal competence and perception of newborn behaviors and maternal role adaptation of the postpartum mothers.

2. Personal factors, social support, perception of maternal competence and perception of newborn behaviors could predicted maternal role adaptation of postpartum mothers.

Scope in the Study

This research was a descriptive study with a particular aim at the investigation on personal factors, social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation of the postpartum mothers. The study was designed to examine the relationships and the predictability on maternal role adaptation of postpartum mothers of personal factors, social support, perception of maternal competence and perception of newborn behaviors. A required data was derived from the group of 4 - 6 weeks postpartum primiparous mothers who were receiving postnatal care at the family planning clinic, Department of Obstetrical Gynecology, Faculty of Medicine, Ramathibodi Hospital during March 23, 1999 June 8, 1999.

Usefulness of the Study

Nursing service : Nurses may use the results of this study as a basic information to promote maternal role adaptation of postpartum primiparous mothers.

Education: Knowledge derived from this study can be utilized for research and development of learning program in nursing school and bring about a better and more effective operation of maternal and child nursing care activities under a special attention is placed on a promotion of maternal role adaptation of postpartum primiparous mothers.

Research: A result of the study can be used as a guidelines for further research with aimed to investigate other concerned variables that might be affected to the adaptation of postpartum primiparous mothers.

Definition of Variables

Age referred to a full year of age of the samples that were computed at the date of survey.

Years of Education referred to a total years of education counted from the primary level to the highest level of education of the mothers.

Family income per month referred to the monthly aggregated income of all family as a whole that was assessed by the mothers herself and classified into 2 categories as s*ufficient* for their family and i*nsufficient* for their family.

Infant care experience referred to the past experience of the mothers in infant care-taking activities that were classified as experienced case and inexperienced case.

Readiness to have a baby referred to the perception of the first-time mother for readiness to have a baby that were classified into 2 categories as readiness or non-readiness.

Type of labors referred to the types of delivery classified as vaginal delivery and abdominal delivery or cesarean section.

Social support referred to the perception of social support of the mothers received from their networks. Social support was collected by Logsdon's Postpartum Supports Questionnaire (PSQ)(1996) which was modified into Thai version by Wongvisetsirikul (1998). There were 4 subscales of social support of House and Cronenwett. The subscales were as emotion, comparison, information and material. The instrument was 34 items and five likert scales (1-5). The lowest and highest scores were 34-170. The lower scores mean poor perceived social support and the higher scores mean good perceived social support.

Perception of maternal competence refered to perceived skill and/or knowledge in infant care of the first-time mothers which collected by Gibaud-Wallston and Wandersman's Scale (1978) which was modified into Thai version by Sumlek (1995). The instrument was 17 items and five likert scales (1-5). The lowest and highest scores were 17-85. The lower and higher scores mean poor and good perception of maternal competence.

Perception of newborn behaviors referred to emotion, opinion of the first-time mother towards her infant behaviors classified into 6 aspects: crying, feeding, spitting up, sleeping, elimination and predictability while the standard criteria was set at the average baby. Thus, the 6 particular behaviors of infants of the target mothers would be compared to those average baby behaviors by using the Neonatal Perception Inventory Form constructed by Broussard & Hartner (1971) and translated by Sumlek (1995). The difference of figure derived from the comparison of behaviors between the two groups. Ascore of zero or a negative number (rating own baby not better than average) is considered high risk baby. A score of +1 or greater (rating own baby better than average) is considered low risk baby.

Maternal role adaptation refered to integration of maternal role and housewife role during 4-6 weeks postpartum. In this study Role Function Adaptation questionaire constructed by Varachnonth (1998) based on Roy's Adaptation theory (1991) ans Jensen & Bobak (1985) concept were used as the assessment tool. The tool was five likert scales composed 33 items which included both maternal and housewife role. The possible score ranged from 33-165. The higher scores meaned much more adaptive than the lower scores.

CHAPTER II

LITERATURE REVIEW

The aim of this study was to identify the relationships among personal factors, social support, perception of maternal competence, perception of newborn behaviors, and maternal role adaptation of postpartum mothers. The literature reviewed then focused on five topics as follows ; 1). maternal role adaptation 2). The influential factors of maternal role adaptation 3). social support 4). perception of maternal competence 5). perception of newborn behaviors and 6). relationships among social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation.

Maternal Role Adaptation

Maternal role was a secondary role as mentioned by Andrews & Roy (1991: 357), the persons worked to illustrate their role function in order to support their human needs and maintain social integrity. It would happen along their expectational role, that meaned responsibility of the ones who take that role would perform (Joes, et al., 1985: 25). An adaptational role function depended upon value, culture, social norm, lesson learned, and person's need (Temple & Fawdry, 1992: 11-15). If persons could not be able to perform their role function for some reason or events, persons might adapt themself in order to illustrate their normal role function.

Maternal role adaptation would started at the beginning of pregnancy and giving birth. The role was permanent role (Rossi, 1968: 26). All mothers would adapt themselves to be mothers and housewives as well to reach the expectation of their society (Hurlock, 1980: 310). Then it was necessary for mother to accept classification and understanding in their roles. During postpartum period, mother needed to adapt her role function. Especially the ones who had the first infant because she would encounter tension and anxiety from changing several role functions,and resume their dialy lives.

The process of maternal role adaptation

The process of maternal role adaptation studied by Rubin (1977 cited by Pillitteri, 1995: 605) could be divided into 3 phases. 1). **Taking-in phase** This phase would occur during 2-3 days after giving birth. During this phase she only was interested in what she needed for her body. She might need some good sleep, good meals. At this time she might feel exhausted from the event just came across. She felt uncomfortable from stitch pain, uterus pain, and breast engorged, and felt terribly strain for her new role or role of "mother" (Pillitteri, 1981: 376). 2).**Taking-hold phase**. This phase would take 10 days after the third day of delivery. She could control her body system. It was the beginning of her new role. She would feel enthusiastic to perform activities which she had to do. In this period of time she was interested in taking good care her for baby. She might ask many questions about infant care. She might be wonder how to give her breast milk. An appropriate special aid and advice including cheering her up would be the best things to her and make her

confront the mothering. 3). **Letting-go phase"**. This phase took place when mother came back to her home. This time she would feel sorrow and worry about her new role to nurse her baby. However, she would realize that her baby had his own characteristic and life style. Mother had to adapt herself in many different ways. This adaptation might include an adaptation for changing family system, establishing the relationship between herself and her husband.

Rubin (1977: 67-75) mentioned that the mothers would adapt herself in order to recover the organs after giving birth. she needed to know how to nurse her baby and how to perform household and social activities.

Mercer (1981: 74) explained maternal role adaptation base on Rubin's conceptualization of maternal role attainment and role aquisition of Thornton and Nadi (1975: 870-885) as a process that developed over four stages as follows : 1). The anticipatory stage as the period prior to incumbency when an individual began social and psychological adjustment to the role by learning the expectation of the role. 2). The formal stage began with actual incumbency during which role behaviors were largely guided by formal consensual expectation of others in the individual's social system. 3). The informal stage began as the individual develops unique ways of dealing with the role were not conveyed by the social system. 4). The personal stage of the role acquisition and individual imposes one's individual style on the role performance and others largely accept the enacment.

Jensen & Bobak (1985: 783-784 ; 816-818) stated that during the post delivery period, new tasks and responsibility arise and old behaviors need to be modified or new ones added. Mother responses to the parental role change over time and tend to follow predictable course as follow:- 1). **Early period.** During the early period mother has to reorganize her relationhip with her baby. The baby needs for shelter, nourishment, protection, and socializing continue. This period is characterized by intense learning and need for nurturing. The family structure and functioning as a system has been forever altered. The duration of this period varies with people but last about four weeks. 2). **Consolidating period.** The next period represents a time of drawing together and uniting the family unit which involves negotiations as to roles (wife/husband, mother/father, parent/child, sibling/sibling), a stabilizing of tasks, a coming to terms with commitments, and a growing competence in infant care activities and being sensitive to the meaning of their infant's behavior. This period last about two months and in conjunction with the early period forms. 3). **Growth period.** Mother and baby grow in their roles until separated by death. The most outstanding feature of the lifelong process of mother-baby interaction is change, consistent evolution over time.

From Jensen & Bobak viewpoint found that, mother has to adapted her role about infant care. Then she went on the housekeeper responsibility, built up family system, and relationship with others family members. Finally, the mother and her baby grew up and advance developing in their role.

In this research, the researcher wanted to study about maternal role adaptation

in postpartum mothers, which discover that the maternal role adaptation was in early and consolidation period base on Jensen & Bobak conceptualization.

Base on the conceptualization, the researcher had summarize maternal role that classified two roles as follow:- 1). Maternal role were action or expressive feeling behaviors for infant care which consist of infant relationship and infant care activities. 2). Housewife role were action or expressive feeling behaviors for housekeeper responsibility which consist of wife role, housekeeper, and offering any help for the family members.

Because of postpartum mothers would confront with these role actions responsibility, which were necessary and important for them throughout this crisis period for stability in their society. The nurses were as care provider who should know which factors facilitated the transition process and should be explored as follows.

The Influential Factors of Maternal Role Adaptation.

1. Demographic factors or maternal factors.

1.1 **Attitude of the mother.** If the mother has her own feeling and notion that her role was very important and valuable would intend to do her best responsibilities (Belsky 1984: 455-462).

1.2 **Maternal maturity.**The maternal tasks would depend on maturity of the mothers. Mercer (1981: 74) concluded that age was one factor effect to maternal identity achievement, and the social acceptance of maternal role as an adult role. That was inappropriate for psychosocially immature teenager which has been supported by several studied (Ralph, 1977 cited by Mercer, 1981: 74; Jone et al., 1980: 579-584 ; Ragozin et al., 1982 cited by Zabielski, 1994: 7).

1.3 **Self-confidence.** The mother who had vigorous personality, highly self confidence would do much better adaptation than the mother who had weakly personality, highly anxiety. (Ball, 1989: 154-175)

1.4 **Maternal experiences and knowledge**. The mother who had opportunities in learning about infant care, responsibilities of a mother, alteration of her physical, and mentally condition after giving birth would adapt her role easier (Curry, 1983: 115). Though difference experiences will have directly effect on adaptation in the first time mothers, so the mother who lack of experiences seem to be lack of confidence to perform her role function (Reeder, 1980: 27) Adam (1963, 72-77) and Sander (1962: 141-166) mentioned that the source which caused postpartum mothers felt tense in role adaptation because of lacking of acknowledge about newborn behaviors. She was also not able to interpret what the meaning of the infant behaviors

1.5 **Education.** Winoker and others(1973: 29) found that, years of education, was the key to help individual intellectual development and intellectual was important for adaptation. Higher educated mothers would improve acknowledge, experience, reasonable ability, and positive attitude and gave a chance to seek for

information and benefit sources which would help in advance role adaptation. Tiengit (1991: 82) found that, higher educated mothers, had better performing adaptation than lower educated mothers. Ralph (1977 cited by Mercer, 1981: 75) found that, mothers who graduated from college or who had attended graduated school had more adaptive behaviors than other mothers. The same results was found by Russel (1974: 294-302).

1.6 **Family income**, might affect maternal role identity (Mercer, 1981: 76). Because of good income, the mothers should be able to sustain and support life basic needs. The mother could provide what she needed for herself and not to worry about economic problems (Reeder et al., 1982: 161-162). Low income, on the other hand, was terrible to face the uncertainly of family economic status.

1.7 **Type of Labor** was one factor which might influence on maternal role adaptation because if the mother who had been done caesarean section, might feel tense for a such critical time (Mercer, 1979 cited by Charuwatcharapaniskul, 1986: 57). Because of she still confronted of pain, uncomfort from the operation which might cause fatique or insufficiently sleep (Sherwen, et al., 1991: 728).

2. Infant's factor.

Infant health and reaction could affect mothers' reaction (Jensen & Bobak, 1980: 405). Infants' figure and sex could affect to mother's adaptation if the figure and sex were different from her imagination. Rubin (1977: 67) mentioned that most of the mothers expected to give birth as term and normal baby. Normal weight infant could more easily establish relationship between maternal and child than the abnormal one. Infant behaviors could affect on feelings and an adaptation to motherhood.

3. **Social factor**. Social factor can be divided into 2 factors as follows.

3.1 **Satisfaction in marital status**. Good relationship between couples was basic principal to parenthood adaptation. Because satisfactory in marital and adaptation in marital life style were the first developmental tasks to be an infant's mother. Mother would feel confidence in her role and her responsibility. Satisfaction in marital status might affect on spouse support and maternal role adaptation of the first time mother, especially within 6 weeks after delivery (Cronenwett, 1985a: 93-99; Ball, 1989: 154-175). Marital satisfied mothers would have less anxiety during postpartum period than the unsatisfied mothers. Watcharasin (1990) found that, first time mother who had different marital status, planning of pregnancy, education level, and income would have significant statistically difference in adaptation to parenthood.

3.2 **Social network**. Close up participation of supporting from relatives, closed friends, neighbours and medical personals could support mothers' confidence to perform her role and satisfaction in childrearing (Cronenwett, 1985a: 97).

Social Support

Social support was psychosocial factor concern with acting behavior and health condition in both physically and soul. The support would be a great deal benefit sources in helping mothers' role adaptation (Andrews & Roy, 1991: 17). In the past 20 years, the concept of the social support had been studied widely in social science by many theorist. Then social support would be defined in differently or similarly in terms of one-way or two-way reciprocity.

The following researchers defined social support was one-way receivers as follows.

Cobb (1976: 300-301) defined social support as a received information that caused ones belief that, there were someone sharing love to them, paying attention to them, admiring and respecting that made one felt a part of society and had good relationship to each others.

Schaefer and colleague (1981: 381) defined social support as a soul support to human being in the society when they came across tenseness.

Tilden (1985: 199-206) stated that social support meaned helping of psychosocial, material, which ones receive from social network.

Trakulwong (1985: 171) defined social support, as something that ones received which might include an information, material, emotional support from another which might be an individual or group. Social support helped the person to perform in the direction that they needed which meant better or healthier.

Kaplan, Cassel and Gore (1977: 47-58) defined social support in 2 characters. First, satisfaction in basic needs which consist of getting respectfulness, appreciation, acceptation, an understanding between one another and helping one another which received from social network. Second, relationship which ones received from social group support which meant they had relationship and significant role alteration between each other.

Social support were defined as two-way reciprocity as follows.

House (1981 cited in Brown, 1986a: 5), stated that, social support was personal interaction which consisted of tender loving care, rely on, financial giving information, and working party help including giving information feedback and information for lesson learn and self-assessment.

Kahn (1979: 85) stated that, social support was purposely interaction from one person to another. There were helping each other. This helping could happen one at a time or could be more.

Brown (1986a: 4-9) stated that, social support was interaction between one another consist of variety dimensions, but the main things were consist of supporting source, supporting method, and number of supporting. His notion was similar to Hibbard and Norbeck, who said, social support had potential in decrease encouraging demand which caused stress. It could protect one from disease and maintain healthy.

In summary , social support meant that the person in society were giving and sharing their help and tender care to each other in the society in many different ways such as; tender loving care, pay attention to one another, acceptation of ones' activities, tightening relationship, social activities participation or being a part of society, acceptation of their value, information received and variety of helping such as material, financial, time working party. Thus, social support would help the person to solve the problems being encountered.

Types of social support and measurements

The term "support" carried extensive colloquial meaning and was therefore more often used than defined. Most people intuitively acknowledged what support they required and whom they regarded as supportive person or groups.

Caplan (1974) outlined three relatively concrete elements of support : helping the individual mobilize psychological resources and master emotional burdens, sharing the individual's tasks, and providing extra supplies money, materials, skill, guidance, to improve handling a situation.

Tolsdorf (1976: 407-417) emphasized " action or behavior that functions to assist the focal person in meeting his personal goals or in dealing with demands of the situation". He also noted that support could be tangible, in the form of money, or intangible, taking the form of encouragement, warmth, and love. Cobb (1976: 300-314) stated that support was information leading the subject to believe that he was cared for and loved, esteemed, and a member of a network of mutual obligations.

House (1981) described social support as interpersonal transaction involve one or more of the followings : emotional concern (liking, love, empathy) ; instrumental aid (goods and services) ; information(about the environment) ; and appraisal(information relevant to self-evaluation).

Kahn (1979) defined support as transactions of affirmation, expressions of agreement, acknowledgement of appropriateness or rightness by another person. He noted that " we go through life seeking meaning, and we depend on the reactions of others for our construction of meaning out of our own experience".

Brown (1987b: 414-418) developed The Support Importance Scale to evaluate participants' perceptions of supportive and consisted of questions base on House's conceptualization of social support. The Support Importance Scale consisted of 45 items which later was 11 items after testing construct validity by using factor analysis and renamed the scale as Support Behavior Inventory.

Brandt and Weinert (1981: 277-280) developed the Personal Resource Questionnaire (PRQ) base on Weiss's conceptualization of social support which consisted of intimacy, nurturance, social integration, self-worth, and guidance. The PRQ was 30 items, 7 point Likert scale.

Cronenwett (1985a: 93- 95), developed Social Network Inventory (SNI) base on House's conceptualization of social support which were instrumental support relabeled material support and appriasal support relabeled comparison support to increase the clarity of meaning of these terms for lay persons. The definitions used were : "**Emotional** The person communicates love, caring, trust, or concern for you. **Material** The person directly helps you such as through gifts of money, helps with house chores, helps with your work, and so on. **Information** The person tells you things you need to know, helps you solve your problems by sharing information or finding out things for you. **Comparison** The person helps you learn about yourself just by being someone in the same situation or someone with similar experiences, he or she is like you in some important way and you feel supported because you can share ideas and feelings with some like yourself".

Logsdon and others (1994: 449-457) classified social support base on House (1981) and Cronenwett (1985) into 4 categories. There were emotional, material,

information, and comparison support. They had developed specifical instrument to measure perception of postpartum support: called Postpartum Support Questionnaire (PSQ). The PSQ was 34 items with eight options which later was five points likert scale modified in Thai version by Wongvisetsirikul (1998).

Funtions of postpartum social support

1). **Emotional support.** During postpartum period the first time mothers would confront with many problems such as daily self care, infant care, integration of the role. Most of them tended to confuse their problem discussions to a person. They felt particularly close to, who might be her husband and mother or a close friend with whom there had been a mutually respectful and long standing relationship. The mechanism through which discussions about problems severe to enhance or restore self-esteem was not known in detail. Probably an important element in this resources was the experience of feeling accepted and valued by another person, even though one was having difficulties in other life areas. The actual helping behaviors that brought about this function were suggested as the supportive interactions including listening attentively and reflecting respondants' statement, offering sympathy and reassurance, sharing personal experiences and avoiding critism or exhortatory advice-giving (Cowen, 1982: 385-395). Two studies showed that emotional support would help mothers to adapt their new role (Jacobson, 1986: 260 ; Mercer, 1986a: 21).

2). **Material support.** People might be a source of support through providing assistance with material or instrument. Material support could include a wide range of

activities such as providing assistance with household chores, taking care of baby, lending or donating money, helping with maternal task, and providing material goods, such as baby clothes, utensil, money. Under postpartum circumstance, material support would be related to well-being of both mother and child. Because it reduced task load or provided increased time for leisure activities of the mothers (Cohen & Syme, 1985: 71). Cronenwett(1985a: 98) found that material support received were positively related to maternal role adaptation.

3). **Information support.** If problems could not be resolved easily and quickly, people probably began a search for information about the nature of the problem, knowledge about resources relevant to the problem, and guidance about alternative course of action. The mothers who were inexperienced with the maternal tasks, might need more information about how to response to infant cues. Thus informational support was a process through which other persons might provide information advice and guidance (Cohen & Symes, 1985: 69). This kind of support would help mothers to solve the infants' problems and made them feel happier, easier in doing their maternal tasks (Crowford, 1987: 41).

4). **Comparison support.** Comparison support was a synonym as appraisal or affirmational support. It was an information relavant to self- evaluation. Inexperienced mothers needed an information that feed back their maternal tasks to change their incorrect performance and restored the best of things that had been done. Comparison support would act as emotional or esteem support that made the mothers' self esteem be high. Flaherty (1988: 191-207) found that comparison support received from the powerful others would made the adolescent mother confident and independent.

Perception of Maternal Competence

Maternal competence was an acting behavior which derived from socialization and past experience in baby care. Rubin (1961: 681-686) stated that maternal role attainment should begin 7 days after delivery the time that she realized her maternal competence. Other role would be easy and made her feel comfortable and satisfactory in her role function. Accomplishment of the maternal role identity could be describe as a women symbolic in the form of role and social needs as Sander (1962: 141-146) specified that, the more realization of abilities to become a mother, the more abilities to interpret infant cues.

Perceptions of maternal competence would occur by cognitive development of mothers as self-study and information seeking from daily life. (Gibaud-Wallston & Wandersman, 1978 cited by Sumlek, 1995: 25).Mercer (1985: 198-204) found that perception of maternal competence in the first time mothers would increase by her own experiences in childrearing day by day. Gibaud-Wallston (cited by Sumlek, 1995: 25) also found that the more of the infant age, the more experience in matenal competence. Perception of maternal competence positively would lead to positive childrearing attitude and maternal identity of the mothers (Mercer, 1981: 75)

Parental competence was a major predictor of parental attachment and response to infant behaviors and infant needs (Mercer & Ferketich, 1990: 268-280). Maternal role competence, the mother's skills and interactions in the care of the infant that promote the infant's development, might be measured either by observation the maternal behaviors or by the woman's perceived competence in the role (Mercer, 1985: 198-204). The mother's perception of her competence the role reflects her

maternal confidence, which was a basis determinant of her capacity as a mother and her response to her infant (Walker, Crain & Thomson, 1986a: 68-71 ; 1986b: 352-355).

The mother activity constructed her new identity by seeking relevant information, which she testified against her values (Deutsch, et al., 1988: 420-443). She studied her infant's characteristics and responsed to her as she established her identity in relation to her infant (Bullock & Pridham, 1988: 321-329 ; Chao, 1979: 211-274). The infant's response to care as a source of mother's confidence or uncertainty had been positively related to the mother'a perceived competence (Bullock & Pridham, 1988: 321-329). Cognitive ability in infant care would increase the woman's mastery or control in the role transition. Control cognitors among mothers of high-risk infants had been positively related to maternal adaptational outcome (Affleck, Tennen & Gershman, 1985: 653-656).

Perception of Newborn Behaviors

It had been long recognized that newborn participate activity in shaping their parent's reaction to them. Jone & Heerman (1992: 228) found the behavioral characteristics of the infant influence parenting behaviors. The infant and the parents each had unique, rhythms, behavior, and the response styles that were brought to every interaction. Infant-parent interactions could be facilitated in any of 3 ways : 1). moduration of rhythm 2). modification behavioral repertoires, and 3). mutual responsitivity (Lowdermilk, Perry & Bobak, 1995: 464-465). Broussard (1979: 91-

100) found that, information about infant behaviors received would influence maternal positive infant behavior. Maternal role identity and quality of infant-care had been shown infant cues response of the mother (Mercer, 1986b: 9-32). Good quality of infant-care at the beginning of life would effect on infantile physiopsychosocial development, particularly during first year of life. Thus the maternal perception of newborn behavior was the best key to maternal role adaptation (Bates et al., 1982: 446-461). Maternal behavior changed in relation to the age, condition and situation of the child (Rubin, 1984). Neonatal risk were negatively related to perception of the newborn during the first 5 postpartal days (Blumberg, 1980: 139-150). Giving information about newborn behaviors could increase maternal-infant interaction and maternal role adaptation (Anderson, 1981: 89-93).

Relationships among Personal Factors, Social Support, Perception of Maternal Competence, Perception of Newborn Behaviors and Maternal Role Adaptation of Postpartum Mothers

Maternal role was secondary role which has responsibility to perform an infant-care. After delivery mother had to integrate both her original role as a house-wife, care-provider, and other role with a new maternal role.Maternal role regarded as a transitional role which were developed and mastered over a period of time. Thus there were many factors that influenced an achivement or mastery of this role. In general the social acceptance of the maternal role as an adult role that was inappropriate for the psychosocially immature teenager had been supported by several

studies. Having an infant before the age of 20 had been linked with child abuse (Bolton, Laner & Kane, 1980: 489-504), but variables of lower levels of education and living conditions, unstable parental background, and prematurity made it difficult to conclude that age was the causal factor (Kinard & Klerman, 1980: 481-488). Teenager parents had been observed to be intolerant, impatient, and inclined to use physical punishment with their children (De Lissovoy, 1973: 22-25).

Jones, and others (1980: 579-584) suggested a lack of readiness for the role in the yonger mother, they observed that mothers under 19 needed their infants less than older mothers and were less sensitive in responding to them. Mercer (1980: 16-27) observed that although the teenager demonstrated considerable growth in the mothering role over one year, she was hampered by her psychosocial maturity in cueing into her infant's need and responding consistently to her infant. Zuckerman, Winsmore & Alpert (1979: 122-125) established that adolescent mothers were more insecure in their maternal role than older mothers and relied on their mothers rather than on professionals for medical advice. Ninety-five adolescent parents were living with extended family at three months postpartum, indicating their need for family support at this time.

Socioeconomic level involved education and income also affect the maternal role adaptation. Russell (1974: 294-302) noted that more highly educateed parents experienced more of a crisis in the transition to parenthood and enjoyed the parenting role less than parents with less education. Lewis & Wilson (1972: 75-138) observed

differences in maternal styles of responding in mother-infant interaction as a function of social class.

Relationships between the woman's support system and her mothering had been found in several reports. Feiring (1976 cited by Mercer, 1981: 75) observed that adaptive maternal behavior was influenced favorably by the mother's perceptions of the amount of positive support her received. In the majority of this situation, the father of the infant was the central of the woman's support system. Thus a woman who was aware of her husband's appreciation, reordering of priorities, and bound in with greater love for her husband would achieve in the maternal tasks of pregnancy (Mercer, 1981: 73). Receiving adequate help from others enhanced woman's self esteem and feeling of being in control (Belle, 1982). The need for social support during pregnancy was reported by all woman (Brown, 1986b: 72-76). Emotional and tangible support provided by the spouse during pregnancy was positively related to the expectant mother's mental well-being (Gjerdingen, Froberg & Fontaine, 1991: 370-375). Women in the lowest social class experienced the greatest stress, had less social support, and had the highest rates of preterm birth (Berkowitz & Kasl, 1983: 283-290 ; Bryce, Stanley & Enkin, 1988: 19-23). Several studies concluded that the availability of positively perceived informal and formal support systems had been identified as being essential for successful maternal role transiton and the development of confidence in parenting during the parental and postnatal periods (Crnic,et al.,1984: 224-235). Burr (1979: 42-111) observed that support in the form of positive feedback from significant others in the environment regarding role performance enhanced the quality of role enacment and self concept. Social support was believe to have both

stress-buffering and direct effects on general health and maternal function (Dunst, Vance & Cooper, 1986: 34-48). Informational and emotional support were positively related to self evaluation of parenting in the first time mothers who attened postpartum clinic of Ramathibodi Hospital (Wongvisetsirikul, 1998). Social support could predict maternal thinking, feeling and perception of newborn behaviors (Colleta, 1981: 191-197 ; Condon, 1985: 271-284). One study found social support was positive significantly related to parent-infant reciprocity and maternal empowermenr to be a mother (Dormire, Strauss & Clarke, 1988: 327-337). In addition maternal competence to response to the infant cues, and infant-care experiences were related to maternal role adaptation (Coyne & Delongis, 1986: 454-460 ; Moore, 1983: 73-79 ; Cronenwett, 1985b: 347-352). Mothers who attended the mother class held by nurses would appreciate in the maternal role and understand the infant behaviors (Golas & Parks, 1986: 209). During the first month of life the common infant behaviors response to comfortable and uncomfortable thing were smiling and crying, such behaviors could influence maternal role behavior and maternal competence (Mercer, 1986a: 9-32). The mother's perception of competence for infant feeding and care were associated with in hospital preparation for bottle feeding mothers and amount of perceived rest for breast feeding mothers (Rutledge & Pridham, 1987: 185-194). Greenberg and others (1973: 783-788) found that mothers who had greater self-confidence in caring for their infants had been in rooming-in nursery . The mothers who had ceasarean births had decreased senses of competence in their abilities to care for their infants because of delayed mother-infant contact.

From the literature review as just mentioned, being the first time mothers may be a focal stimuli that make them adapt to the transitional role or maternal role. But, whether mothers will be well adaptation or not, there are several factors that are the contextual stimuli may influence to this process such as age, years of education, family income, infant care experience, readiness to have a baby, type of labors, social support, perception of maternal competence, perception of newborn behaviors which are the focused factors study in this research.

CHAPTER III

MATERIALS AND METHODS

This descriptive research was designed to study the relationships among the personal factors, social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation of postpartum mothers and to find which variables could predict maternal role adaptation.

Population and Sample

The population of this study was the postpartum primiparous mothers who came for follow-up at the Family Planning clinic, Department of Obstetrics Gynecology, Ramathibodi Hospital within 4-6 weeks after delivery. The sample subject were selected by the following inclusion criterias :

1. The postpartum primiparous mothers had no complications during both pregnancy and postpartum.

2. The mothers who had healthy babies and they lived together since the birth of children.

3. Ability to read and write Thai language as well.

4. Agreement to participate and sign the informed consent.

Sample Size

The sample size was computed by using Thorndike's formula (Thorndike, 1978 cited by Thawatchai Worapongsathorn, 1989: 60). The formula was

$$n = 50+(10\times \text{independent variables})$$

the independent variables of the research = 9

thus $n = 50+(10\times 9) = 140$ cases

then, the total suitable samples should be 150 cases.

Setting

All data assessment was performed at the Family Planning clinic, Department of Obstetrics Gynecology, Ramathibodi Hospital which had run the postpartum clinic on Tuesday and Thursday at 9 to 12 a.m. Before postpartum mothers received their investigation and treatment, they had to listen suggestion and information about family planning from staff nurse at conference room No.1. The data collection atarted from March to June, 1999.

Instrumentation

1. Personal Data

This record was designed by the researcher. It included the date and type of labors, age, education, occupation, family income, readiness to have a baby, type of family and infant care experience. **(Appendix B).**

2. Postpartum Support Questionnaire

The 34 items Postpartum Support Questionnaire (PSQ ; Logsdon, et al., 1994: 449-457 ; Logsdon, et al., 1996: 129-142) had 4 subscales base on House's(1981) and Cronenwett's (1985a) social support which were emotional, material, informational, and comparison.

Logsdon & McBride experimented this with the 33 new mothers. They also found out the confidential values of the internal consistency by analysis of Cronbach alpha reliability coefficients which was 0.79.

Content validity, were recommended by two maternity nursing experts and six new mothers. The PSQ modified in Thai version by Wongvisetsirikul (1998) was used by the mothers to rate how much they received support from their networks on a scale ranging from none (1) to most (5). A summary scores were ranging from 34-170 **(Appendix C)**. A higher score indicated a higher support received, and a lower score indicated a lower support received. Content validation was done by 8 the family nursing specialists and one linguistic specialist. After correction, testing with the 30 samples who were the primiparous mothers. Cronbach alpha reliability coefficient for overall questionnaire was 0.94. When used the 200 samples, Cronbach's alpha in this samples were 0.91.

For this study, testing with the 40 postpartum primiparous mothers 4-6 weeks, Cronbach alpha reliability coefficient was 0.93 and 0.92 with the 150 samples.

The criteria of this scores were

≥ 80% meant that the mother received social support good

60-79.9% meant that the mother received social support rather good

40-59.9% meant that the mother received social support moderate

< 40% meant that the mother received social support low

3. Maternal competence perception questionnaire.

The 17 items Parenting Sense of Competence Scale (PSOC ; Gibaud - Wallston & Wandersman, 1978) was used to measure mothers' perceptions of competence of childrearing. This tool was applied widely with the primiparas (Walker, 1992). It was used in both father and/or mother. However, this study used only the mother form which evaluated:-

1). The perception of valuing and / or comforting to be mother.

2). The perception of skill and / or knowledge ability to be a good mother.

This questionnaire was qualified by the convergent validity and the discriminant validity. When using with the 49 primifathers and the 48 primimothers, the Cronbach alpha reliability coefficient of overall was 0.80. Testing the stability by repeating the 49 primifathers and the 50 primimothers during 6 weeks, 4 ½ months and 6 months after delivery, the result in the primifathers showed r were 0.78, 0.71, and 0.77, in the primimothers r were 0.80, 0.74, and 0.57 in sequence.

Later, Sumlek (1985) translated it into Thai version. Content validity by the linguistic specialist, and the 6 mothers and child specialist. Each item was rated on a scale of strongly disagree(1) to strongly agree(5). There were 8 positive (items 1, 6, 7, 10, 11, 13, 15, 17) and 9 negative (items 2, 3, 4, 5, 8, 9, 12, 14, 16). After the 9 negative scores reversed to positive scores, then a summary score ranging from 17-85 **(Appendix D).**A higher score indicated a higher maternal competence perception, and

a lower score indicated a lower maternal competence perception. Then she testing with the 30 postpartum mothers for understanding and correlation. Cronbach alpha reliability coefficient was 0.77, and 0.82 when using with the 205 samples.

In this study, the questionnaire was tested with the postpartum primiparous mothers during 4-6 weeks. Cronbach alpha reliability coefficient was 0.70, and 0.76 in the 150 samples.

The criteria of this scores were

≥ 80% meant that the mother perceived maternal competence good

60-79.9% meant that the mother perceived maternal competence rather good

40-59.9% meant that the mother perceived maternal competence moderate

< 40% meant that the mother perceived maternal competence low

4. Perception of newborn behaviors questionnaire.

The Neonatal Perception Inventory (NPI) developed by Broussard and Hartner (1971) The NPI was divided into 2 parts, the first part (NPI- I) was used to measure 1-2 days after birth, the second part(NPI-II) measured 1 month after birth, in fact, both of them were similar. They consisted of 6 behaviors, listed as crying, feeding, spitting up, sleeping, elimination, and predictability, however, this study used only NPI - II.

This questionnaire consisted of 2 parts which were similar questions. The first 6 questions were used to measure the mother's perception of behaviors of the average

baby, and the second 6 questions were used to measure their perception of your baby behaviors during postpartum period.

The questionnaire was likert rating scale from none (1) to a great deal (5) **(Appendix E)**. Score summation was measured by substracting the mother's perception of your baby from the perception of the average baby. If a summary score was equal zero or less than zero mean high risk baby. On the contrary, if a summary score was equal or above 1 score mean low risk baby.

Senasuttipun (1985) translated it into Thai version and validation of the content was done by the 10 specialists. After testing in the 20 primiparous mothers, the Cronbach alpha reliability coefficient was 0.88.

Later, Sumlek (1995) translated it again, she brought it to be qualified by a linguistic specialist and 6 maternity and newborn specialist to prove the content accuracy. After testing in the 30 postpartum mothers, the Cronbach alpha reliability coefficient was 0.78 and 0.80 in the 205 samples.

Test-retest reliability with the 21 primiparous mothers after delivery 4-6 weeks was tried out in this study. The time between test and retest for 3 days, the result showed r was 0.92.

5. Maternal role adaptation questionnaire.

Maternal Role Adaptation Questionnaire developed by Varachnonth (1998) based on Roy Adaptation Theory (Andrews & Roy, 1991) and Jensen&Bobak concept (1985). The questionnaire was asking about the action or the expression of mother in postpartum period. It had 33 items which were totally positive, divided in 2 parts

1. Maternal role; consisted of 18 items

1.1. Relationship with a baby had 8 items from 1-8

1.2. Infant care activity had 10 items from 9 - 18

2. The housewife role; consisted of 15 items

2.1 The wife role had 7 items from 19-25

2.2 The housewife role had 8 items from 26 -33

The questionnaire was likert rating scale from strongly disagree (1) to strongly agree (5) **(Appendix F)**. A summary scores ranged from 33 - 165 scores. A higher score could be interpreted that the postpartum primiparas could adapt their role well, a lower scores showed poor maternal role adaptation. Furthermore, the interpretation could be done by using the total scores devided by the number of question which was the mean:-

4.00-5.00 meant that the mother adapted her role well.

3.00-3.99 meant that the mother adapted her role rather well.

2.00-2.99 meant that the mother adapted her role rather bad.

1.00-1.99 meant that the mother could not adapted her role.

Content validation of the questionnaire was done by a obstetrician, a behavioral specialist, a psychiatric nursing teacher, and the 3 obstetrics nursing teachers. Cronbach alpha reliability coefficient was 0.91 when tried out with 30 postpartum mothers.

For this study, testing with the 40 primiparous mothers, Cronbach alpha reliability coefficient was 0.90, and 0.92 in the 150 samples.

Data Collection Methods

All data was collected by researcher

1. The researcher wrote a formal letter for approval asking formal permission from the Dean of Faculty of Medicine, Ramathibodi Hospital in order that enable to perform such data collecting from postpartum primiparous mothers at the Family planning clinic, Obstetric-Gynecology Out Patient Department on Tuesday and Thursday from 6-9 a.m.

2. Contacted and asked a permission from the Head of Family planning clinic.

3. Select the sample characteristics from patient profile of postpartum mothers.

4. While the samples were waiting for the doctor, the researcher introduced herself to them for cooperation which base on the patient's right, and resist that they must not be disturbed or postpone the queue.

5. If they were satisfied and consent inform **(Appendix A),** the researcher explained the questionnaire and how to check, and let them answer in conference room No. 1 with unlimitted time. The questionnaire has 5 documents, the first was personal data, the second was the maternal role adaptation questionnaire, the third was the perception of newborn behaviors questionnaire, the forth was the perception of maternal competence questionnaire, and the last was the postpartum support questionnaire. While answering, the researcher was around them to answer any questions and checked the finished papers for completion.

Data Analysis

Assessed data was analysed by computer program SPSS/FW version 7.5 (Statistical Package for The Social Science/for Windows) as follows:-

1. Personal data was analysed in term of frequency, percentage,range, means and standard deviation.

2. The scores of social support, perception of maternal competence, perception of newborn behaviors, and maternal role adaptation, by overall, by subscale, and by items were analysed in term of range, means, and standard deviation. Because of the unequal number of the question in each subscale , the percentage of means in each subscale were analysed.

3. Correlation among means of age, years of education, family income, infant care experience, readiness to have a baby, type of labors, social support, perception of maternal competence, perception of newborn behaviors, and maternal role adaptation scores were analysed by Pearson's product moment correlation coefficiency.

4. Stepwise multiple regression was used to analysed the predictability of those independent variables to maternal role adaptation.

5. Because the calculation of the multiple correlation coefficient was set to use the interval scale variables, the variables must be changed from the nominal scale to the interval scale by dummy variables process (Prasith-rathsint, 1998: 110) which were family income (sufficient =1, insufficient = 0), infant care experience (yes =1,no = 0), readiness to have a baby (yes =1, no = 0), type of labors (vaginal=1, abdominal =

0). Correlation among means of age and year of education, dummy data of family income (sufficient=1, insufficient=0), infant care experience (yes=1, no=0), readiness of having a baby (yes=1, no=0), type of delivery (vaginal delivery=1, abdominal delivery=0), means of social support, perception of maternal competence, perception of newborn behaviors, and maternal role adaptation scores were analysed by Pearson's product moment correlation coefficiency.

CHAPTER IV

RESULTS

In this chapter the results of the data analysis were presented as follows:

Characteristics of the Samples

The total samples of this study were 150 postpartum primiparous mothers with age between 17 to 41 years of age. The mean and standard deviation of ages were 26.22 and 4.70 years. The majority of the samples finished at high school level education (23.4%). Their level of education from Prathom 4 to Bachelor degree. The mean and standard deviation of years of educations were 11.04 and 3.56 years. The majority of the samples were as employee (53.3%), single families (62%), sufficient family income per month (90%), readiness to have a baby (88.7%), and inexperience infant care (81.3%). The general characteristics of the samples were summerized in Table 1.

Table 1 Samples characteristics: number, percentage, range, mean and standard deviation (n = 150).

Characteristics	Number	Percent	Range	Mean	S.D.
Age					
<20 years	7	4.7			
20-35 years	138	92.0			
>35 years	5	3.3			
Total	150	100.0	17-41	26.22	4.70
Years of education					
6 years/compulsary school	32	21.3			
9 years/junior high school	33	22.0			
12 years/high school	35	23.4			
14 years/diploma	23	15.3			
16 years/bachelor degree	27	18.0			
Total	150	100.0	4 -16	11.04	3.56
Occupation					
Housewife	51	34.0			
Employee	80	53.3			
Goverment official	10	6.7			
Commerce	5	3.3			
Others	4	2.7			

Table 1 (continued).

Characteristics	Number	Percent
Family income per month		
sufficient	135	90.0
insufficient	15	10.0
Type of labor		
Vaginal delivery	119	79.3
Caesarean section	31	20.7
Readiness to have a baby		
Readiness	133	88.7
Non-readiness	17	11.3
Characteristics of family		
Single family	93	62.0
Extended family	57	38.0
Infant care experience		
Experience	28	18.7
Inexperience	122	81.3

Social Support

The social support scores of samples ranged from 59 to 144 scores (possible scores ranged from 34 to 170). The mean and standard deviation were 102.47 and 18.69 (60.28%), that presented the samples received social support in rather good level. The highest to the lowest social support scores was informational support (62.88%), comparison support (61.25%), material support (58.98%), and emotional support (58.35%). All of this data and the 3 highest and lowest items were shown in table 2.

Table 2 Possible value, Range, Means, Standard deviation, Percentage of means, Social support classified by the overall, by each subscale, and by item. (n= 150).

Social support	Possible value	Range	Means	S.D.	Percentage of means
Overall social support	**34-170**	**59-144**	**102.47**	**18.69**	**60.28**
• Emotional	10- 50	15 - 44	29.19	6.32	58.35
• Materials	9- 45	11- 45	26.69	7.40	58.98
• Informational	10- 50	13- 47	31.48	6.11	62.88
• Comparison	5- 25	6-23	15.31	3.65	61.25

Table 2 (continued)

Social support	Possible value	Range	Means	S.D.
Each items				
Maximum. No....				
1. Needed to have information on breatfeeding. (I)	1 - 5	1 - 5	3.91	0.89
2. Needed to have information on taking care of my own body as it heals following the birth of my baby. (I)	1 - 5	1 - 5	3.90	0.93
3. Needed to have information on how to care for my baby's umbilical cord. (I)	1 - 5	1 - 5	3.87	0.89
.				
.				
.				
Minimum. No...				
1. Needed help in watching my baby so that I could have time alone together with my husband. (M)	1 - 5	1 - 5	2.23	1.24
2. Needed to have others act as if I am special. (E)	1 - 5	1 - 5	2.31	1.18
3. Needed help in cleaning the house / apartment. (M)	1 - 5	1 - 5	2.33	1.17

E= Emotional support, I = Informational support, M = Material support

Perception of Maternal Competence

The overall perception of maternal competence of the samples ranged from 38-68 scores(possible scores ranged from 17 to 85). The mean and standard deviation were 53.71 and 5.54 scores (63.19%). It was shown that perceived maternal competence of the sample was rather good level. When considering to each subscale, a skill/knowledge subscale ranged from 20 to 40 scores (possible scores ranged from 8 to 40), means= 27.54, S.D.= 3.53, and percentage of means= 68.85%. The results showed that a skill/ knowledge competency for being a good mother of the samples was rather good. As for valuing/ comfort subscale ranged from 12 to 33 scores (possible scores ranged from 9 to 45), means= 26.17, S.D.= 4.50, and percentage of means= 58.16%. Thus it could be summarized that the valuing/ comfort of the samples was in a moderate level.The 3 highest and lowest items were shown in table3.

Table 3 : Possible value, Range, Means, Standard deviation, and Percentage of means, Perception of maternal competence classified by the overall, by each subscales and by item(n=150).

Perception of maternal competence	Possible value	Range	Means	S.D.	Percentage of means
Overall Perception of maternal competence	**17-85**	**38-68**	**53.84**	**5.54**	**63.34**
• Skill / Knowledge	8-40	20-40	29.61	3.53	74.01
• Value / Comfort	9-45	12-33	24.11	4.53	53.58

Table 3 (continued).

Perception of maternal competence	Possible value	Range	Means	S.D.
Each items				
Maximum No...				
1. Being a good mother is a reward in itself. (V)	1 -5	1 - 5	4.38	0.66
2. The problems of taking care of a baby are easy to solve once you know how your actions affect..(V)	1 -5	1 - 5	4.13	0.65
3. I would make a fine model for a new mother to follow in order to learn...(V)	1 -5	1 - 5	3.87	0.75
Minimum No...				
1. My mother was better prepared to be a good mother than I am. * (V)	1 -5	1 - 5	2.30	1.00
2. A difficult problem in being a parent is not knowing whether you are doing a good... * (S)	1 -5	1 - 5	2.32	0.85
3. I don't why it is, but sometimes when I'm supposed to be in control, I feel more like... * (V)	1 -5	1 - 5	2.55	0.88

* meant negative items

S = Skill / Knowledge Subscale, V = Valuing / Comfort Subscale

Perception of Newborn Behaviors

The perception of newborn behavior scores of samples ranged from -5 to 13 (possible value ranged from -24 to 24). Overall perception of newborn behavior of the samples was positive perception (77.3%). When consider to each item, it could be seen that the most positive perception of the sample was about trouble feeding 65.3%. While the perception of difficulty sleeping was found as the most negative concern 80.7 %. All of this data was shown in table 4.

Table 4 : Possible value, Range, Frequency, Percentage of perception of newborn behavior classified by overall and by items scores. (n= 150)

Perception of newborn behaviors	Possible value	Range	Frequency	Percentage
Overall Perception of newborn behavior				
• Positive	1-24	1-13	116	77.3
• Negative	0 to -24	0 to -5	34	22.7
Perception of newborn behavior by items				
1. Crying				
• Positive	1-4	1-3	63	41.3
• Negative	0 to -4	1 to -1	87	58.7
2. Trouble feeding				
• Positive	1-4	1-4	98	65.3
• Negative	0 to -4	0 to -3	52	34.7

Table 4 (continued).

Perception of newborn behaviors	Possible value	Range	Frequency	Percentage
3. Spitting up				
• Positive	1-4	1-3	54	36
• Negative	0 to -4	0 to -2	96	64
4. Difficulty sleeping				
• Positive	1-4	1-3	29	19.3
• Negative	0 to -4	0 to -3	121	80.7
5. Difficulty elimination				
• Positive	1-4	1-3	58	38.7
• Negative	0 to -4	0 to -2	92	61.3
6. Predictability				
• Positive	1-4	1-3	63	42
• Negative	0 to -4	0 to -2	87	58

Role Adaptation of Postpartum Mothers

The role adaption of postpartum mothers scores ranged from 89-164 (possible scores ranged from 33 to 165). The means and standard deviation were 4.17 and 0.43 scores, which meant that the mothers could well adapt to the new role.When considered to each subscale, it showed that the maternal role was well adapt with means = 4.51, S.D.= 0.39, and percentage of means = 90.29. While the housewife role was well adapt with means = 3.76, S.D. = 0.60, and percentage of means = 75.17 as shown in table 5 which included the data of the 3 highest and lowest items.

Table 5 Possible value, Range, Means, Standard deviation, and Percentage of means of Role adaptation of postpartum mothers classified by the overall, each subscale, and each item. (n=150)

Role adaptation of postpartum mothers	Possible value	Range	Means	S.D.	Percentage of means
Overall role adaptation	**33-165**	**89-164**	**4.17**	**0.43**	**83.42**
• Maternal role	18- 90	58- 90	4.51	0.39	90.29
• Housewife role	15- 75	31- 75	3.76	0.60	75.17

Table 5 (Continued).

Role adaptation of postpartum mothers	Possible value	Range	Means	S.D.	Percentage of means
Each items					
Maximum No...					
1. When I saw my baby, I felt love and concerned about my baby. (M)	1 - 5	3 - 5	4.86	0.38	
2. I talked to my baby with love. (M)	1 - 5	3 - 5	4.80	0.42	
3. I was hold and took good care in order to warm. (M)	1 - 5	3 - 5	4.80	0.43	
Minimum No...					
1. After delivery, I could action outdoors activity with members in my family. (H)	1 - 5	1 - 5	3.02	1.29	
2. After delivery, I could told about feeling or want to sexual with spouse as before. (H)	1 - 5	1 - 5	3.14	1.06	
3. After delivery, I shered time in order to close up spouse. (H)	1 - 5	1 - 5	3.27	0.97	

M = Maternal role, H = Housewife role

Result of Hypotheses Testing

Hypothesis 1 Personal factors, social support, perception of maternal competence, and perception of newborn behavior are significantly associated with maternal role adaptation of postpartum mothers.

According to an analysis of Pearson Product Moment Correlation to identify the relationships among personal factors which included age, years of education, family income, infant care experience, readiness to have a baby, and type of delivery ; social support ; perception of maternal competence ; perception of newborn behavior toward maternal role adaptation of postpartum mothers as shown in table 6. It found that age was positively associated with years of education, readiness to have a baby and maternal role adaptation of postpartum mothers at a low level of respectively $r = 0.26, 0.18, 0.24$; $p<.01, .05, .01$ statistical significantly. It revealed that the older mothers who attained higher education and readiness to have a baby would better adapt than the younger lower educate and non-readiness to have a baby mothers. In addition, it was found that age has negatively associated with the type of delivery at a level of $r = -0.14$, $p<.05$ statistical significantly. Therefore it could be summarized that the younger mothers had more easier delivery by vaginal route than the older mother who rather ended their pregnancy by ceasarean section. When considering to the years of education, it was found that education was positively associated with social support and maternal role adaptation at a level of respectively $r = 0.36, 0.22$, $p< .01$ statistical significantly. It indicated that the higher educated mothers would received more social support and could better adapt their roles than the

lower educated mothers. Moreover, it was discovered that years of education has negatively associated with type of delivery.It meaned that the older mother would rather end up their pregnancy by ceasarean section. Ages of the mothers was positive related to years of education statistical significant. It meant that the mothers who were older had higher education than the younger mothers. The family income which revealed as having a high level of positive association with readiness to have a baby at a level of $r = 0.72$, $p<.01$ statistical significantly. The social support, was positively associated with perception of newborn behavior and maternal role adaptation of postpartum mothers at a level of respectively $r = 0.15, 0.22$; $p< .05, .01$ statistical significantly. It concluded that, the mothers who received more social support would have more positive perception of newborn behaviors and could adapt their maternal role easier. The perception of maternal role competence was low positively associated with maternal role adaptation of postpartum mothers at a level of $r = 0.24$, $p< .01$ statistical significantly. Furthermore, it was proved that perception of newborn behavior was low positively associated with maternal role adaptation of postpartum mothers at a level of $r = 0.16$, $p<.05$ statistical significantly. The family income, infant care experience, readiness to have a baby, and type of delivery were not associated with maternal role adaptation of postpartum mothers. Thus this hypothesis could partially accepted. The correlation matrix was shown in table 6.

Table 6 Coefficient- Correlation among Different Variables. (n= 150)

Variables	1	2	3	4	5	6	7	8	9	10
1.Age	1.00									
2.Years of education	0.26**	1.00								
3.Family income	0.07	0.00	1.00							
4.Infant care experience	-0.12	0.08	-0.01	1.00						
5.Readiness to have a baby	0.18*	0.00	0.72**	0.01	1.00					
6.Type of labor	-0.14*	-0.12	-0.12	0.03	-0.08	1.00				
7.Social support	-0.04	0.36**	0.11	-0.07	-0.02	-0.03	1.00			
8.Perception of maternal competence	0.07	0.05	-0.00	-0.01	0.05	0.01	-0.01	1.00		
9.Perception of newborn behaviors	-0.01	0.08	0.15	-0.01	0.05	-0.08	0.15*	0.07	1.00	
10.Maternal role adaptation of postpartum mother	0.24**	0.22**	0.12	-0.08	0.04	-0.06	0.22**	0.24**	0.16*	1.00

** P<.01 , * P<.05
Family income (sufficient = 1, insufficient = 1)

Infant care experience (yes = 1, no = 0)

Readiness to have a baby (yes = 1, no = 0)

Type of labors (vaginal = 1, abdominal = 0)

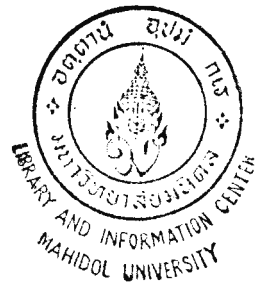
Hypothesis 2 Personal factors, social support, perception of maternal competence, and perception of newborn behaviors could predict the maternal role adaptation of postpartum mothers.

The analysis of Stepwise Multiple Regression as shown in table 7 indicated 3 variables selected into a predictive equation. They were age, social support, and perception of maternal competence. All the 3 variables could explain 16.4 % of varience of maternal role adaptation. The first variable was age which could explain 6 percent of varience of maternal role adaptation scores statistical significantly ($p<.01$). The second variable was the social support could explain 5.3 % of varience of maternal role adaptation scores ($p<.001$). The last variable was the perception of maternal competence which could explain 5.1 % of variance of maternal role adaptation scores ($p<.01$). Thus this hypothesis could partially accepted.

Table 7 Stepwise Multiple Regression analysis, predict maternal role adaptation of postpartum mothers .(n = 150)

Number	Variables	R^2	R^2 change	F change	p	β	t	Sig.
1	Age	0.060	0.060	9.368	0.003	0.244	3.061	0.003
2	Social support	0.113	0.054	8.648	0.003	0.232	2.991	0.003
3	Perception of maternal competence	0.164	0.051	8.850	0.003	0.226	2.975	0.003

Overall F (3, 146) =9.558, p < .001



CHAPTER V

RESEARCH DISCUSSIONS

This research was a study of the relationships among personal factors, social support, perception of maternal competence, perception of newborn behaviors, and maternal role adaptation of postpartum mothers, inclusion of the study on prediction competence on maternal role adaptation. The researcher had discussed the results in terms of sampling the characteristics, social support, perception of maternal competence, perception of newborn behaviors, relationships of variables in the study and the factors that could predict the maternal role adaptation of postpartum mothers and the research limitations as follows.

Characteristics of Sampling Group

Through this study, it was found that the sampling groups of postpartum mothers at 4-6 week period, were in average age of 26.22 years, chiefly in the age range of 20-35 years (92%) which was in their early adult age and with their full readiness in body, mind, social intellect and maternity (Sritham Thanapume, 1992 : 84). These findings were in consistent with the concept of Mercer (1981: 74-75) who found that mothers who were over 20 years old would start having their maternal attitude in nursing their infants. And

most of the sampling groups were readiness to have a baby (88.7%) although they belonged to single-family pattern rather than extending-family and with only 18.7% of their infant care experience, they were with good level of education, that was high school level (45.4%) which was higher than the compulsory level (Pratom 6). The majority were waged employees (53.3%) with satisfactory level of income (90%). The type of the sampling group in this study were similar to those studied by Gerdprasert (1999), Wongvisetsirikul (1998), Phumonsakul (1992) and Sumlek (1995) who had done their studies at the Ramathibodi Hospital and Khon Kaen Maternity and Newborn Center. But this research study might differ from the study of Varachnonth (1998) who studied the sampling group in the case of postpartum mothers under inspection after their delivery at Siriraj Hospital, Somdej Pra Pinklao Hospital, King Mongkut Hospital.

Social Support

In this research, it was found that the sampling group had average scores on social support in the rather good level (Mean = 102.47, SD. = 18.69, Percentage of means = 60.28%) of proximity in value attained to the research carried out by Wongvisetsirikul (1998) for the 200 cases of postpartum mothers. But it had shown less score than the research work of Logsdon (Logsdon, et. al., 1994: 453) in a study of American postpartum mothers for 105 cases by using the same PSQ. This finding indicated that western culture was different from that of Thailand in the sense that the western family

pattern would be in single-family. The most important persons deemed as social support after delivery would be their husbands, and as male and female were considered socially equal, they had to share equal responsibilities in their childrearing. However, the cases in Thailand were that the husband was considered as a bread winner or head of family and he was to be responsible for looking after his family by working out of home. All the houseworks were, therefore, left to the wife.

After making an analysis on individual basis of the sampling group it was found that the informational support was the most support received from their own social network. Therefore the sampling group had gained their knowledge from doctors and nurses during their pregnancy period, laboring-period and after-delivery. In addition some of them could get information from magazines, brochures, books or consulting nurses who worked in postpartum clinic by phones in case they might have any doubts or queries after having gone home. These findings were in consistent with the social support under individual items ranking at the three-most-important priorities on information,which were, 1). Needed to have information on breastfeeding. 2). Needed to have information on taking care of my own baby as it heals following the birth of my baby. 3). Needed to have information on how to care for my baby's umbilical cord.

The emotional support was the least support they perceived (at 58.35% in average which could be explained from oral interviews that most of them had to take care of the infants by themselves because their husbands went out at work. They, however, had time to do the chatting with their husbands after they came home from work, and very often their husbands were too tired from work so they had scarcely any opportunity to talk to

each other. Sometimes these situations could make them feel anxious, feel uneasy but could not discuss with anyone. These might be factors that caused the sampling groups to receive emotional support at a moderate level. The finding differed from the study of Wongvisetsirikul (1998) who studied 200 cases of postpartum mothers and found that the sampling group received high emotional support. It could be explained for the phenomena by the present economic crisis brought about less earnings or lower incomes to each family. It also forced the head of family to have more responsibility. They had to seek more earnings from other sources or to work overtime. As a result they had less time for family. The comparison support was the subordinate support next to the information support, with average at 61.25%, close to the information support. This finding could be explained that the sampling groups received comparative assessment from the persons who were close to them. Although the social community in the metropolitan city was no longer in a cohesive pattern and people tended to be independent from each other, the sampling groups might have their free time after delivery for discussing with doctors, nurses and / or the group of mothers admitted at the same time after delivery to attain a guideline on solving problems similar to theirs. The mothers received least materiel support about 58.98 %. It could be explained that when the family's earning was lessened they had to earn more money and it was believed that all families were under the same condition, thus they did not wish to depend on others on materials support .

Perception of Maternal Competence

This research had found that the sampling group had an average scores in the perception of maternal competence at a rather good level (Means= 53.71, S.D= 5.54, Petcentage of means = 63.19%). These finding could be explained that the sampling group chosen from the mothers without any complication from gestation until after-delivery period and most of the sampling group were of vaginal delivery (79.3%), which the rehabilitation state after delivery was very fast together with the age of early adult had been the period of maturity in development and readiness to have a baby (88.%). Mercer (1981 : 74-75) had stated that age was a factor affecting the success of performing maternal role but mothers with older age should be more mature and the state of maturity was the quality that enables a mother to be adaptive and patient with changed situations through their wisdom, perception and experience in the past for use in their own decision-making. In addition to this information from the sampling group with high school education which was consistent with the study carried out by Winokur, & et al. (1973: 29) who found that education plays as the factor helping a person to have intellectual development, ability to develop their knowledge, skills and improvement of operational performance.

Considering on perception of maternal competence in subscale, it was found that the sampling group had the capability in skill / knowledge at 68.85% which was consistent with the information that the most of the sampling group were during 20-35

years of age. They also were well educated and received information support at the highest level. The result was similar to the study done by Mercer (1985: 198-204) that perception of maternal competence should be added up along with their maturity in time and experience. The perception of maternal competence in skill / knowledge they should develop along with the perception on valuing / comfort, of which the sampling group had their scores at 68.85% and 58.16%.

Perception of Newborn Behaviors

This research showed that the sampling group had their scores in the perception of newborn behaviors at -5 to13 scores from the possible scores of -24 to 24. The positive scores in the perception of newborn behavior were overall at 77.3%, showing that the majority were more positive perception of their babies than an average one in general. They were also satisfied with their babies. Such outcome might be derived from the fact that they had a rather good level of social support especially on information backup and this might also include the instruction related to behavior of the newborn babies since they were in the hospital. And 18.7% of the mothers had their infant care experience. The study was shared by Wiles (1984 : 253-257) who found that mothers under a teaching program had a better perception about the behavior of the newborn at one month after delivery better than those mothers without receiving teaching program. The findings were as same as the study done by Senasuttipun (1985 : 105) who had found that the knowledge

concerning the behavior of newborn had a positive relationship with the same perception in postpartum mothers with statistical significantly. And the study of Broussard, & et al. (1970 : 23) indicated that the instruction given to mothers of primigravidas' at after-delivery stage when they were in the hospital provided them with a better understanding in the mother's perception.In addition, this study was conducted on the sampling group under delivery at 4-6 weeks with their real experience in learning about their own babies for a certain period, resulted in the sampling group having a rather good level of perception of newborn behaviors (77.3%).

Considering the perception of newborn behaviors by items, the most positive perception of the mothers was infant feeding. Which showed that the mothers concerned on infant feeding much more than other matters. While the most negative perception was infant sleeping difficulty, because of the biological rhythms of their infants were still not as same as their mother's rhythms during 4-6 weeks of infant age.

Maternal Role Adaptation of Postpartum Mothers.

This research found that most of the sampling group had well maternal role adaptation (Means = 4.17, S.D = 0.43). Maternal role was found at well level (Means = 4.51, S.D= 0.39) and the housewife role was lower than the maternal role. (Means = 3.76, S.D.= 0.60). The results were similar to the study of Varachnonth (1998) with the same measurement. It could be explained that the sampling group who came to visit

antenatal care before 20 weeks of geststional age at Ramathibodi Hospital would be given the mother instruction about how to prepare themselves for being a mother. It showed that the sampling groups had their own self-interests. They prepared themselves to have babies and to have their delivery at the hospital where there were good preparations in personnel, technical and academic standards. These conditions helped them to attained with the various forms of knowledge, i.e., programs conducted at the prenatal care unit, teaching program for the period after delivery both individual and groups. Before they were discharged from the hospital they would also be instructed on bathing-infant demonstration, nursing of infant and return demonstration by themselves with a closely-watched assistance by nurses and nursing students at the postpartum ward. Moreover, they could learn about nursing techniques from other mothers' experience who were admitted at the same time. Pounyathalung (1998) found that the postpartum mothers instructed by educatiive supportive in nursing infants should have more capabilities in nursing infants than the groups without such instruction. From the mentioned reasons the sampling group could make use of the knowledge and given-instructions into precise practice. The study had also found that the sampling group received overall social and individual support. The informational support was perceived at rather well level (Table 2) which enhanced the mothers to have well level of maternal role adaptation.

Factors related to Maternal Role Adaptation and Predictability of Maternal Role Adaptation

This study was to identify the predictability of maternal role adaptation by personal factors, social support, perception on maternal competence, perception of newborn behaviors. The results showed that age, social support, perception on maternal competence, could explain the variance of maternal role adaptation 16.4% with statistical significantly. And it was found that age was the first factor which could explain the variance of maternal role adaptation 6% (Table 7) and when it was considered at its coefficient value, the correlation value of Pearson between age and maternal role adaptation was associated to each other ($r = 0.24$, $P<0.01$) as shown in table 6. The results showed that age was the most influential variable for the maternal role adaptation. The result supported the concept of Mercer (1981: 74-75) that age was a factor affecting success in functioning of a maternal role. Although the state of being motherhood was a stress to all women at every age group but the mothers who were older could adjust their role adaptation better and they had more patience with changed situations because maturity covers intellect, learning and past experience in making decision. The study conducted by Ragozin and others (1982 cited by Zabelski, 1994: 7) pointed out in the same result that age of a mother has a positive relationship to the maternal role adaptation. In addition, it was found in the study carried out by Charuwatcharapaniskul (1986: 121-122) that the postpartum mothers with their age over 30 had a better role adaptation than

mothers who were younger than 20 years of age and the study of Kamolsoonthorn (1994 : 20) also found that age played relative roles over the maternal role adaptation in postpartum mothers.

The second variable that could predict the maternal role adaptation was the social support which could predict the variance of maternal role adaptation scores 5.3 % (Table 7) and it was also found that the social support has a positive relationship with the maternal role adaptation at statistical significantly ($r = 0.22$, $p<0.01$). In this study it was found that the sampling group perceived rather good level of social support (Table 2) and the explanation was that they had perceived sufficient supported and would enable them to encounter stresses and the role adaptation in a good level. It was explained that received emotional support from close members of their families, friends, and medical personnel included of information, materials and working support together with guidance in role changing would be guidline for their maternal role adaptation, stability in life, feeling of good valuing in life and lessening the stresses (Cohen & Wills, 1985 cited in Maneesaeng, 1995: 68). It could be assumed that social support was a valuable resource in helping mothers to be have appropriate behaviors which support to the accuracy in Roy adaptation theory that collaboration and cooperation of mothers resulted with the creation of relationships and mutual dependence to significant others and support system were joint stimulants affecting maternal role adaptation (Andrew & Roy, 1991: 17). The results were similar to the study of Cronenwett (1985a : 98) who found that social support received of adolescent mothers had positive relationships to maternal role adaptation. Sreyasak (1996: 99) found the social support from the family had a positive relationship to maternal role

adaptation in adolescent mothers at after delivery. Munsuk (1996: 55) found that the social support had a positive relationship to maternal role adaptation with mothers who had done ceasarean section. Varachnonth (1998 : 63) found that the support from the husband had a positive relationship to maternal role adaptation after delivery.It could be explained that the postpartum mothers received more social support which would encourage them in receiving the kindness, love and understanding from their husband who gave them in various ways. Moreover, the Thai society and culture were binding affections among her social network very strongly, although in some families had been separated to be a single-family pattern they still had connections with their existing families. This factor served in boosting stability in the mind of the mothers, lessening their stress and helped them in controlling the situations and themselves in order to adjust to the new role.

The last variable in the predictive equation was the perception on maternal competence, that could explain the variance of maternal role adaptation scores 5.1% and it was found that the perception on maternal competence had a positive relationship to the maternal role adaptation with statistical significantly ($r = 0.24$, $p<0.01$). These were consistent to the study by Mercer (1985: 198-204) which indicated that the perception on maternal competence should be added along with the maturity, time, experience. Mercer also found that postpartum mothers were beginning their perceptive capability at one month after delivery and more degree of perception at 4 month period after delivery. And it was found in the study of Walker, Crain and Thomson (1986: 107) that mother's attitudes toward themselves became more positive over time and self-confidence was less related to indicators of maternal identity for multiparas' than for primiparas'. Thus it

could be stated that perception of maternal competence had developed from the cognitive process, awareness in perception and role performance which would be increased along with the time and infant care experience, directly affecting the maternal role adaptation.

In the study the researcher also found that the variables related to role adaptation but could not be used in its prediction, they were, years of education and perception of newborn behaviors. It was probable that years of education had a positive relationship to maternal role adaptation with statistical significantly ($r = 0.22$, $p<0.01$) and also had positive relationship with age of mothers($r=0.26$, $p<.01$). It meaned that if the postpartum mothers had well educated they would be older and had better maternal role adaptation, on the contrary the low educated and younger mother would not. The perception of newborn behaviors had a little positive relationship to maternal role adaptation with statistical significantly ($r = 0.16$, $p< 0.05$) and could not predict maternal role adaptation. It could be concluded that mothers who perceived newborn behaviors would perform better role adaptation which could lead to the explanation that whether the postpartum mothers would have a better role adaptation or not relying on the perception of newborn behavior of the mother themselves. Through this study, it was found that the sampling group had the positive overall perception of newborn behavior (77.3%) (Table 4) which showed that mothers were pleased with their infants, and infant cues created affection and binding commitment through expressions or practices that mothers had with their infants in relation to behaviors shown by infants as the infant cues expressions were symbolic meaning to helping the mothers to be informed of the babies' expressions and understand such behaviors. This findings were as same as the results of the study of Bullock and

Pridham (1988: 321-329) who found that newborn behavior was the most frequent factor affecting the mother's confidence in the first 3-month period after delivery. Such finding was also as same as of the study done by Sumlek (1995: 57). The perception of newborn behaviors could not predict on the maternal role adaptation because of its little related positively to maternal role adaptation, even the mothers had a rather good level of informational support that made the mothers have good perception in newborn behaviors. However, the study of Broussard (1979: 91-100) had found that giving instruction to postpartum mothers at early stage after delivery influenced better perception of newborn behavior of the mothers which was the same as the result of the study of Senasuttipun (1985) who found that the knowledge related to newborn behavior was positively related to the postpartum mothers role adaptation with statistical significantly ($r = 0.16$, $p<0.05$).

Other factors were not included in the predictive equation were family incomes, infant care experience, readiness to have a baby, type of labor.

The family incomes were related to the maternal role adaptation but without statistical significance at the level of $p< .05$. These showed that the family incomes did not have a direct relationship to the maternal role adaptation, in consistent to the two studies of Maneesaeng (1995) and Norkaew (1993) in finding that family earning had no relationship with maternal role adaptation .

The infant care experience had a negative relationship to maternal role adaptation but without statistical significance at the level of $p<.05$. This showed that the sampling groups who had infant care experience showed that their role adaptations were not different. These finding were consistent to the study of Watcharasin (1990) in finding that

adolescent mothers with different experience in infant care were not adapting their maternal role differently, but it was inconsistent with Curry (1983: 115) who stated that the mothers' infant care experience provided them with skills and confidence in infant care and leading to better role adaptation.

The readiness to have a baby had little relationship with the role adaptation but without statistical significance. It indicated that the readiness to have a baby had no effect on maternal role adaptation.

The type of labor had a negative relationship to maternal role adaptation but without statistical significance. It could explained that either vaginal or abdominal delivery might have no effect on their cognitive and skills in childrearing of the mother during 4-6 weeks postpartum. The result were similar to the study of Varachnonth (1998) in finding that the type of delivery had a relationship to the maternal role adaptation without statistical significance ($p<.05$). Sreyasak (1996) found that adolescent mothers who had normal delivery and abnormal delivery had adapted their maternal role in differently and Charuwatcharapaniskul (1986) found that mothers with vaginal delivery and mothers with abdominal delivery could adapt their maternal role indifferently as well.

In addition, it was found that all the predictive values had multicollinearity. For example, the age had a positive relationship with the year of education and readiness to have a baby with statistical significantly ($r = 0.26$, $p<.01$, $r = 0.18$, $p <.05$); the age had a negative relationship with the type of labor in statistical significantly ($r = -0.14$, $p<.05$); the year of education had positive relationship to the social support in statistical significantly ($r = 0.36$, $p<.01$) and family incomes had positive relationship with the

readiness to have a baby at statistical significantly ($r = 0.72$, $p<.01$) (Table 6). With such multicollinearity it had led to a lower degree of relationship to predict the maternal role adaptation .

From the above-mentioned explanation the researcher could summarized that age, social support and perception of maternal competence could predict the maternal role adaptation 16.4% with residual percentage of 83.6 which could not explained under the remaining factors which were years of education, family income, infant care experience, readiness to have a baby, and type of labor and perception of newborn behaviors. It might be other factors not in this study under the theoretical framework of Roy's adaptation theory which could explain the maternal role adaptation such as self-esteem, occupation, life-style pattern, characteristics of personality, etc.

Research Limitations

This research was a one-time collection of data. The maternal role adaptation might be subject to change with time period and/or situations then. This research had not been carried out through the method of randomized, so the results of the study could not be generalized to other population .

CHAPTER VI

RESEARCH CONCLUSIONS AND SUGGESTIONS

Research Conclusions

This research was a descriptive research to study the relationships among personal factors, social support, perception of maternal competence, perception of newborn behaviors and maternal role adaptation of postpartum mothers guided by Roy Adaptation Theory (Roy & Andrew, 1991: 5-53). The sampling groups were 150 primiparous mothers at 4-6 week period who attended the family planning clinic at Ramathibodi Hospital, during 23 March to 8 June 1999 . The sampling group were the primiparous mothers who had no complication during pregnancy and after delivery, infants were healthy and mothers performing self-maintenance, literate in Thai language both reading and writing and willing to participate in this research.

In data collection the researcher has implemented it by herself through the research instruments comprising of : personnal questionnaire, postpartum support questionnaires as created by Logsdon and other(1994: 449-457) following the theoretical framework on social support by House (1981) and Cronenwett (1985a) translated into Thai by Wongvisetsirikul (1997), perception of maternal competence questionnaire as created by Gibaud and Wallston (1977) to be called as, "Parenting Sense of Competence Scale – PSOC under the model of Wagner & Morse's (1975 :

451-459),perception of newborn behavior questionnaire as created by Broussard and Hartner (1971), known as Neonatal Perception Inventory – NPI, comprising of 2 versions, role adaptation of postpartum questionnaire as created by Warajnonth (1998), following the theoretical framework of Roy Adaptation Theory (1991) and the conceptual thought of Jensen and Bobak (1985). After it was treated with a sampling group of 150 cases, the reliability scores calculated by Cronbach's alpha coefficient value are at 0.92, 0.76, 0.92 respectively with the exception in the perception of newborn behaviors which was done with test – retest on reliability scores with primiparous mothers for 21 cases at 3-day away period coming out with the value of r was 0.92. All data was analysed by using the SPSS/FW version 7.5 (Statistical Package for the Social Science / For Windows). The research conclusions could be summarized as follows :

1.The sampling group was mostly in the age ranged of 17-41 years with high school level of education, years of education at average of 11.04 years, with profession in employment service, in single family pattern and family income in a sufficient with readiness to have a baby (88.7%) and infant-care inexperience at 81.3%.

2.The sampling group was at overall moderately received moderate social support especially informational support, and comparison, material and emotion support respectively.

3.The sampling group had moderate-perception in maternal competence with skill / knowledge that they should possess in the good level of maternal competence, as same as the value / comfort in being motherhood and/or satisfaction in mother's role at moderate level.

4.The sampling group had positively the perception of newborn behaviors as considered at numerical items which was found that they have good level in perception on newborn behavior about feeding but with little perception on difficulty in sleeping of their infants.

5.In all the 150 cases of the sampling group it was found with a good level of adaptation role of postpartum mothers at 84.41% and with individual consideration to be in good level of maternal role at the average of 90.29 % whereas housewife role is at average of 75.17 %.

6.Personal factors which were ages and years of education were of positive relationship to maternal role adaptation of postpartum mothers statistical significantly ($r=0.24, 0.22, p<0.01$ respectively).

7.The social support had its positive relationship to maternal role adaptation of postpartum mothers statistical significantly ($r=0.22, p<0.01$).

8.The perception of maternal competence had positive relationship with maternal role adaptation of postpartum mothers statistical significantly ($r=0.24, p<0.01$).

9.The perception of newborn behaviors had positive relationship with maternal role adaptation of postpartum mothers statistical significantly ($r=0.16, p<0.05$).

10.Age, social support and perception of maternal competence could predict 16.4% of variance of the maternal role adaptation scores statistical significantly at level 0.05.

Suggestions

This research revealed that ages could predict maternal role adaptation role of primiparous mothers at 6%, age and social support could predict the varience of maternal role adaptation scores about 11.3% and the perception of maternal competence could joinly predict maternal role adaptation increasing to 16.4%. Evidence of the research result could be explained that whether the mothers would adapt themselves well or not depending on ages, social support and perception of maternal competence. Then, in supporting primiparous mothers to have better role adaptation the recommendation would be suggested on

Nursing practice :

1.Nurses should start providing an information to the primiparous mother during pregnancy and postpartum period to help them to adapt maternal role with good attitude towards their pregnancy.The nurse should provide them in suitable way to appriciate process of adaptation. Nurses should allow their times to listen their problems and help to find out solutions.

2.This research also found that the perception in maternal competence that could jointly predict the adaptation of primiparous mothers. The nurse should provide support for primiparous mothers with perception on skill, knowledge, and/or awareness on satisfaction value in being a good mother with the following guidelines.

2.1The nurse should provide the knowledge to primiparous mothers since gestation period by the consideration on age, educational period as criteria of

separating the group and person – the teaching materials should be comprising slides, books, brochures, flipcharts, video, for their better understanding.

2.2The nurse should give such instructions also to concerned persons related to the primiparous mothers such as husband, husband's mother and/or their own mothers in relation to being a good mother and necessary knowledge. All these were to aid and support in being a capable and knowledgeable primiparous mothers during pregnancy and after-delivery period.

3. Nurses in postpartum unit should promote the adaptation in mothers with the following performances.

3.1 The nurse should arrange meeting-time for their relatives such as husbands, and/or mothers in order to get them involved in the feeding of infants after their delivery to ensure that they would receive a warm-feeling at this special time, it also gave a chance for their husbands to see themselves on feeding performance,to help to support their wives in childrearing after delivery.

3.2 During such instruction period as stated above, the nurse should allow other persons to join in the sessions especially with the instruction about after-delivery performance. This strategy will help their relatives to understand very clearly and be able to make use of their given-knowledge. The nurse should also suggest their relatives, especially the husbands to foster their empowerment and to help to ease their works in feeding infants and working at home as it will in turn help the mothers in their adaptation.

3.3 Although the research result had been found that a better adaptation on their role function after delivery was in a good level but in term of individual item it

had been found that their adaptation to housewife's role, performance with family members outside their home, expressing-out feeling or sexual desire to their husband, time-allotment with their husband were still not good. The nurses in postpartum unit should emphasize in giving instructions about the above-mentioned matters.

Nursing administration :

1. The nursing administrator should support and promote the nurses to be aware of the importance in assessing factors on the primiparous mothers, to implement the planning in a more appropriate way by carrying out periodic training sessions for staff nurse.

2. Making well planned promoting policy and supporting the instructing service to the targetted groups continuously. The program should include training the nurses in order to prepare personnel ready to serve appropriate care.

Nursing education :

To conduct learning and teaching to nursing students in obstetric subject by :

As the research results revealed that age, time spent in education, perception in maternal competence, perception in newborn behavior, social support,had relationships with adaptation on mother's role. In the management for learning and teaching, the instructors should emphasize the students be aware of these factors by assessment the primiparous mothers with risky conditions. It was advisable to support and encourage the learning and teaching approaches by giving the core of importance to the service receivers. In addition to these, overall nursing-treatment should be stressed especially

on nursing of mothers during pregnancy and after-delivery period by stressing on factors relevant to body, mind and social values at the same time because the methods could encourage the primiparous mothers to have their appropriate adaptation.

Researching approach :

1. The study result indicated that the prediction capability on adaptation in mother's role with primiparous mother, from the factors found in this study, was only 16.4%. This showed that there would have many other factors supporting the predictive capability in adaptation of mother's role in primiparous mothers. It should be conducted by means of test-retest with other factors, such as primiparas'with complication during pregnancy, including the separation from their husbands after having the first child, etc.

2. The sampling group in this research study was homogenous character and to a rather great extend about their age, time year of education, family income, type of labor, readiness to have a baby etc. It was suggested to conduct with other sampling groups with more diversified ones in the future.

BIBLIOGRAPHY

Adam,M.(1963). Early concerns of primigravida regarding infant care activities. Nursing Research, 12 (2), 72-77.

Affleck, G., Tenner, H., & Gershman, K.(1985). Cognitive adaptation to high-risk infants : The search for mastery, meaning, and protection from future harm. American Journal of Mental Deficiency,89, 653-656.

Anderson, C.J. (1981). Enhancing reciprocity between mother and neonate. Nursing Research, 30 (2), 89-93.

Andrew, H.A. & Roy, S.C. (1991). The Roy Adaptation Model: The Definitive Statement. Appleton & Lange.

Ball,J.A.(1989). Postnatal care and adjustment to motherhood. In Robinson, Sarah & Thompson(Eds).Midwives Research and Childbirth Vol.1(pp. 154-175). A.M. London: Champman & Hall.

Bates, J., Olsen, S.L., Pettit, G.S., & Bayles, K. (1982). Dimensions of individuallity in the mother-infant relationship at six months of age. Child Development, 53, 446-461.

Belle, D.(1982). Lives in stress : Women and depression. Bevery Hills, CA : Sage Publications.

Belsky, J., Rovine. M. (1984). Social-network contact. family support, and the transition to parenthood. Journal of Marriage and the Family, 46, 455-462.

Berkowitz, G.S., & Kasl, S.V.(1983). The role of psychosocial factors in spontaneous preterm delivery. Journal of Psychosomatic Research, 27, 283-290.

Blumberg, N.L.(1980). Effects of neonatal risk, maternal attitude, and cognitive style on early postpartum adjustment. Journal of Abnormal Psychology, 89, 139-50.

Bolton, F.G.Jr., & et al.(1980). Child maltreatment risk among adolescent mothers : A study of reported cases. American Journal of Orthopsychiatry,50, 489-504.

Brandt, P.A. & Weinert, C. (1981). The PRQ- A Social Support Measure. Nursing Research, 30 (5), 277-280.

Broussard, E.R., Hartner, M.S.S., & Miram, S.S.(1970). Maternal perception of the neonate as related to development. Child Psychiatry Human Development, 1 (Fall), 23.

Broussard, E.R. & Hartner, M.S.S. (1971). Further considerations regarding maternal perception of the newborn. In J. Hellmuth (Ed.). Exceptional Infant,2, 432-449. New York: Brunner / Mazel.

_____. (1979). Assessment of the adaptive potential of the mother-infant system : the neonate perception inventories. Seminar in Perinatology, 3, (1), 91-100.

Brown, M.A. (1986a). Social support during pregnancy : A unidimensional or multidimentional construct. Nursing Research, 35(1), 4-9.

_____.(1986b). Social support, stress, and health ; A comparison of expectant mothers and fathers. Nursing Research,35, 72-76.

_____. (1987b). How fathers and mothers perceive prenatal support. The American Journal of Maternal Child Nursing, 12, 414-418.

Bryce, R.L., Stanley, E.J., & Enkin, M.W.(1988). The role of social support in the prevention of preterm birth. Birth, 15, 19-23.

Bullock, C.B. & Pridham, K.F. (1988). Sources of maternal confidence and uncertainty and perception of problem-solving competence. Journal of Advanced Nursing, 13, 321-329.

Burr, W.R. (1979). Symbolic interaction and the family. In W.R.Burr., Hill., F.I.Nye., & I.L.Reiss(Eds). Contempolary Theories about the family.(Vol. 5, pp.42-111).New York: Fre press.

Caplan, G. (1974). Support systems and community mental health. New York: Behavioral Publications.

Chao, Y.M. (1979). Cognitive operations during maternal role enacment. Maternal - Child Nursing Journal, 8, 211-274.

Charuwatcharapaniskul, U. (1986). Comparison of maternal attachment, postpartum adaptation to motherhood and postpartum depressive feeling between primiparous mothers withnormal labour and mothers with ceasarean section. Master of Science (Nursing), Faculty of Graduate Studies, Mahidol University.

Cohen, S. & Syme, S.L. (1985). Social support and health. New York : Academic Press, Inc.

Cobb, S.(1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38, (5), 300-314.

Colletta, N.D. (1981). Social support and the risk of maternal rejection by adolescent mothers. Journal of Psychology, 109, 191-197.

Condon, J.T. (1985). The parental-fetal relation : A comparison of male and female expectorant parents. Journal of Psychosomatics Obstratics and Gynecology,4, 271-284.

Cowen, E.L. (1982). Help is where you find it : Four informal helping groups. American Psychologist, 37, 385-95.

Coyne, J.C. & Delongis, A. (1986). Going beyond social support : The role of social relationships on adaptation. Journal of Continuing and Clinical Psychology, 54, 454-460.

Crnic, K.A., Greenberg, M.T., Robinson, N.M. & Ragozin, A.S. (1984). Maternal stress and social support : Effects on the mother-infant relationship from birth to eight month. American Journal of Orthopsychiatry, 54, 224-35.

Cronenwett, L.R. (1985a). Network structure, Social support and Psychological outcomes of pregnancy. Nursing Research, 34 (2), 93-99.

_____. (1985b). Parental network structure and perceived support after the birth of the first child. Nursing Research, 34(6), 347-352.

Cropley, C. (1979). Assessmant of Mothering Behavior. In J. Suzanne Hall(Eds), Family High risk Parenting.(pp. 14-15). Philadelphia : J.B. Lippincott.

Crowford, G. (1987). Support networks and health- related chang in the elderly : the theory-based nursing strategies. Family and Community, 10(2), 29-48.

Curry, M.A.(1983). Variables related to adaptation to motherhood in normal primiparas women. JOGNN, 12(2), 115-121.

De Lissovoy, V.(1973). Child care by adolescent parents. Child today,2, 22-25.

Deutsch, F.M., Ruble, D.N., Flaming, A., Brooks-Gunn, J., & Stangor, C.(1988). Information seeking and maternal self-definition during the transition to motherhood. Journal of Personality and Social Psychology,55, 420-443.

Dormire, S.L., Strauss, S.S., & Clarke, B.A.(1988). Social support and adaptation to the parent role in first time adolescent mothers. JOGNN,18(4), 327-337.

Dunst, C.J., Vance, S.D., & Cooper, C.S.(1986). A social systems perspective of adolescent pregnancy : Determinants of parent and parent-child behavior.Infant Mental Health Journal,7, 34-48.

Elliott, R., Stiles, W.B., Shiffman, S., Barku, C.B., Burstein, B., & Goodman, G. (1982). The empirical analysis of help-intended communication. In T.A. Wills (Ed.), Basic process in helping relationship. New York : Academic Press.

Erickson, M.L.(1976). Assessment and management of developmental change in children. St.Louis: C.V. Mosby.

Fawcett, J.(1981). Need of ceasarean section birth parent. JOGNN,10(September-October), 372-376.

Flaherty, M.J.(1988). Seven caring functions of black grandmothers in adolescent mothering. Maternal - Child Nursing,17, 191-207.

Gerdprasert, S.(1999). Relationships among demographic factors, spouse support, transition to motherhood and postpartum depression. Master thesis in nursing. Faculty of Graduate Studies, Mahidol University.

Gibaud-Wallston, J. & Wandersman, L.P.(1978). Development and utility of the parenting sense of competence scale. Paper presented at American psychological association meeting, Tornoto, Canada.

Gjerdingen, D.K., Froberg, D.G., & Fontaine, P.(1991). The effects of social support on women's health during pregnancy, labor and delivery, and the postpartum period.Family Medicine,23, 370-375.

Golas,G.A., & Parks, P. (1986). Effect of early postpartum teaching on primiparous knowledge of infant behavior and degree of confidence. Research in Nursing and Health, 9(3), 209-214.

Grace, J.T.(1993). Mother's self-reports of parenthood across the first 6 months postpartum. Research in Nursing and Health, 16, 431-439.

Greenberg, M., Rosenberg, I., & Lind, J. (1973). First mothers rooming -in with their newborns : It's impact upon the mother. American Journal of Orthopsychiatry,43, 783-788.

Hall, L.A.(1980). Effect of teaching on primiparas' perception of their newborn. Nursing Research,29(5), 317-322.

House,J.W.(1981). Work stress and social support. Menlo Park : Addison-Welsley.

Hurlock, E.B.(1980). Developmental Psychology : A life scan approach. (5th ed.). New Delhi : Teta McGraw-Hill publishing company.

Jacobson, D.E.(1986). Type and timing of social support. Journal of Health and Behavior, 27(September), 250-264.

Jensen, M.B., & Bobak, I.M.(1980). Handbook of Maternity Care. (2nd ed.). St.Louis: The C.V.Mosby Company.

_____. (1985). Maternity and Gynecological Care : the nursing and the family. (3rd ed.). St.Louis : The C.V. Mosby Company.

Joes, I.M., et al. (1985). Man, Health and Nursing: Basic concepts and theories. Reston: Reston Publishing Company.

Jone, F.A., et al.(1980). Maternal responsesiveness of mother during the postpartum period : Age difference. Pediatrics,65(3), 579-584.

Jones, O., & Heerman, J.(1992). Parental division of infant care : contextual influences and infant characteristics. Nursing Research,41(4), 228.

Kahn, R.L.(1979). Aging and social support. In M.W.Riley, Aging from birth to death : Interdisciplinary perspective(pp.71-91). Colorado : Westview press.

Kamolsoonthorn, D.(1994). A study of relationship between social support and maternal role adaptation of primiparous women. Master of Art (Medical and Health Social Science), Faculty of Graduate Studies, Mahidol University.

Kaplan, B.H., Cassel, J.C. & Gore, S.(1977). Social support and Health. Medical Care, 15(5), 47-58.

Kinard, E.M., & Klerman, L.V.(1980). Teenage parenting and child abuse : Are they related? American Journal of Orthopsychiatry,50, 481-488.

LeMaster, E.E.(1959). Parenthood as acrisis. Marriage and Family Living, 19(11), 352-355.

Lewis, M., & Wilson, C.D.(1972). Cross- Cultural studies of mother infant interaction : Description and consequence. Human Development,15, 75-138.

Lodermilk, D.L., Perry, S.E., & Bobak, I.M.(1995). Maternity Nursing(5th ed.). St. Louis : Mosby.

Logsdon, M.C., McBride, A.B., & Birkimer, J.C.(1994). Social support and postpartum depression. Research in Nursing and Health,17(12), 449-457.

Logsdon, M.C., Usui, W., Birkimer, J.C. & McBride, A.B.(1996). The Postpartum Support Questionnaire : Reliability and Validity. Journal of Nursing Measurement, 4(2), 129-142.

Maneesaeng, S.(1995). The relationship between social support perception of birth experience, and adaptation in adolescent mothers. Master of Science (Nursing), Faculty of Graduate Studies, Mahidol University.

Martin, L.L., Mastroianni, L.J., & Reeder, S.J.(1980). Maternity Nursing. Philadelphia : J.B.Lippincott Company.

Mercer, R.T.(1979b). "She's a multip ... she knows the ropes." MCN, 301-304.

_____.(1980). Teenage motherhood : The first year ; Part 1. The teenage mother's view and responses ; Part 2. How their infants fared (Research and Studies Department). JOGNN,9 (Jan-Feb), 16-27.

_____ .(1981). A theoretical framwork for studying the factors that impact on the maternal role. Nursing Research, 30(2), 73-77.

_____. (1981). The nurse and maternal tasks of early postpartum. MCN,6(5), 73-77.

_____. (1985). The process of maternal role attainment over the first year. Nursing Research, 34(4), 198-204.

_____. (1986a). Predictors of maternal role attainment at one year post-birth. WJNR,8(1), 9-32.

_____. (1986b). First-time mother : Experiences from teens to forties. New York : Springer Publishing.

Mercer, R.T., & Ferketich, S.L.(1990). Predictors or parental attachment during early parenthood. Journal of Advanced Nursing, 15(3), 268-280.

Moore, D.(1983). Prepared childbirth and marital satisfaction during the antepartum and postpartum periods. Nursing Research, 32, 73-79.

Munsuk,S. (1996). Social support, maternal-fetal attachment and maternal role adaptation of postpartal mothers who had cesarean birth. Master of Nursing Science (Maternity and Newborn Nursing), Faculty of Graduate Studies, Mahidol University.

Norkaew, C. (1993). The relationship between spouse support perception of childbirth experience, selected factors and maternal adaptation in cesarean mothers. Master of Science (Nursing), Faculty of Graduate Studies, Mahidol University.

Pillitteri, A. (1981). Maternal Newborn Nursing : Care of Growing Family.(2nd ed.). Boston : Little Brown.

_____. (1995). Maternal and Child Nursing : Care of Childbearing family.(2nd ed.).Philadelphia : J.B.Lippincott Company.

Phumonsakul, S.(1992). Social support, self-care agency and outcome of pregnancy. Master of Science (Nursing) Faculty of Graduate Studies, Mahidol University.

Pounyathalung, T. (1998). Effect of supportive-educative nursing system on self-care and dependent care agency and satisfaction with nursing carein primiparas. Master of Nursing Science, Faculty of Graduate Studies, Mahidol University.

Prasith-rathsint, S. (1998). Multivariate Techniques for Social and Behavioral Sciences Research: Principles, Methods and Application. (6th ed.). Bangkok: National Institute & Development Administration.

Reece, S.M.(1993). Social support and the early maternal experience of primiparas over 35. Maternal Child Nursing Journal,21(3), 91-98.

Reeder, S.J. (1980). Maternity Nursing. (4th ed.). Philadelphia: J.B.Lippincott Company.

Reeder, S.J., Mastroianni, L.J., & Martin, L.L.(1983). Maternity Nursing.(15th ed.). Philadelphia : J.B.Lippincott.

Robson, K.S., & Moss, H.P.(1970). Patterns and determinants of maternal attachment. The Journal of Pediatrics,77(6), 979.

Rossi, A.S.(1968). Transition to parenthood. Journal of Marriage and the Family,28 (Feb), 26-39.

Roy, S.C., & Roberts, S.L. (1981). Theory Construction in Nursing: An adaptation model. The United States of America: Prentice- Hall, INC.

Roy, S.C., & Andrew, H.A.(1991). The Roy Adaptation Model : The Definitive Statement. The United States of America : Appleton & Lange.

_____. (1999). The Roy Adaptation Model. (2nd. Ed.). The United States of America : Appleton & Lange.

Rubin, R.(1961). Basic maternal behavior. Nursing Outlook,9(11), 683-686.

_____. (1967a). Attainment of the maternal role : Part I Process. Nursing Research,16(Summer), 237-245.

_____. (1967b).Attainment of the maternal role : Part II Model and Referants. Nursing Research,16(Fall), 342-346.

_____. (1977). Binding-in in the postpartum period. MCN Journal,6, 67-75.

_____. (1984). Maternal identity and Maternal experience. New York : Springer Publishing.

Russell, C.S. (1974). Transition to parenthood : Problem and Gratifications. Journal of Marriage and the Family,36, 294-302.

Rutledge, D.L., & Pridham, K.F.(1987). Postpartum mothers' perception of competence for infant care. JOGNN,17(3), 185-194.

Sander, L.W.(1962). Issues in early mother-child interaction. Journal of American Academy of Child Psychiatry,2, 141-166.

Sarbin, T.R., & Allen, V.L.(1968). Role theory. In G. Lindzey & E.Aronson(Eds.), The Handbook of Social Psychology(Vol.1-reading). M.A.: Addison-Wesley.

Schaefer, C., Coyne, J.C., & Lazalus, R.S.(1981). The Health-related functions of social support. Journal of Behavioral Medicine,4(4), 381-404.

Senasuttipun, W.(1985). Relationships between knowledge of newborn's behavior, self-concept, adaptation to motherhood, and maternal perception of newborn's behavior in mothers of the first child. Master of Science (Nursing), Faculty of Graduate Studies, Mahidol University.

Sherwen, L.N., et al.(1991). Nursing of the Childbearing Family. Connecticut : Appleton & Lange.

Sreyasak, A. (1996). Factors associated with adolescent mother's adaptation to roles during postpartum. Master of Science in Public Health (Family Health), Faculty of Graduate Studies, Mahidol University.

Sumlek, S. (1995). A causal model of maternal role mastery among first time mothers. Docteral dissertation, Faculty of Graduate Studies, Mahidol University.

Temple,A. & Fawdry, K.(1992). King's theory of gole attainment resolving filial caregiver role strain. Journal of Gynecological Nursing,3(2), 11-15.

Thornton, Russell, & Nardi, P.M. (1975). The dynamics of role acquisition. Am. J. Social, 80(Jan), 870-885.

Tiengit, R. (1991). The relationships between perception of health, spousal support and adaptation in pregnancy induced hypertensive pregnant women. Master of Science (Nursing), Faculty of Graduate Studies, Mahidol University.

Tilden,V.P.(1985). Issue of conceptualization and measurement of social support in the construction of nursing theory. Research in Nursing and Health,8(6), 199-206.

Tolsdorf, C.(1976). Social networks, support, and coping. Family process, 15,407-17.

Trakulwong, B. (1985). Psychosociology and sanitation. Handout for studying sociomedical science. University of Sukhothaithammathiraj, Bangkok: Chuanpim Publishing.

Varachnonth, P. (1998). Spouse support and maternal role adaptation of the postpartum mothers. Master of Science (Nursing), Faculty of Graduate Studies, Mahidol University.

Walker, L.O. (1992). Parent- Infant Nursing Science: Paradigms Phenomena Methods. Philadelphia: F.A. Davis. Co.

Walker, L.O., Crain, H., & Thomson, E.(1986a). Maternal role attainment and identity in the postpartum period : Stability and change. Nursing Research,35(2), 68-71.

_____.(1986b). Mothering behavior and maternal role attainment during the postpartum period. Nursing Research,35(6), 352-355.

Wacharasin, C. (1990). The relationships between anxiety, marital relationship and adaptation to maternal role in normal primigravida. Master of Science in Public Health (Family Health), Faculty of Graduate Studies, Mahidol University.

Wiles, L.S. (1984). The effect of prenatal breastfeeding education on breastfeeding success and maternal perception of the infant. JOGNN,13(4), 253-257.

Winokur, M.Z., et al.(1973). Intellegence and adjustment to chronic hemolysis. Journal of Psychosomatic Research, 17-29.

Wongvisetsirikul, P. (1998). Relationships among personal factors, marital relationship,social support, self-esteem, transition to motherhood and postpartum anxiety and depression in first-time mothers. Docteral dissertation, Faculty of Graduate Studies, Mahidol University.

Young, R.K.(1986). Primiparas attitudes toward mothering. Issue in Comprehensive Pediatric Nursing,9, 259-272.

Zabielski, M.T.(1994). Recognition of maternal identity in preterm and fullterm mothers. Maternal-Child Nursing Journal,22(1), 2-36.

Zahr, L.K.(1991). The relationship between maternal confidence and mother-infant behaviors in premature infants. Research in Nursing and Health,14, 279-286.

Zuckerman, B., & et al.(1979). A study of attitudes and support system of inner city adolescent mothers. Journal of Pediatrics,95(1), 122-125.

ธวัชชัย วรพงศธร. (2532). ข้อพิจารณาการใช้สถิติทดอยพหุคูณสำหรับงานวิจัย. วารสารวิจัยทางการแพทย์,3 (มกราคม), 55-62.

ศรีธรรม ธนะภูมิ. (2535). พัฒนาการทางอารมณ์และบุคลิกภาพ. (หน้า 84) กรุงเทพฯ: โรงพิมพ์ชวนพิมพ์.

APPENDIX

APPENDIX A

Explanation and Protection of Rights for Research Participants

Re : Request for Response in Questionnaires

Attn : All Mothers with Primigravid Case

I am Lieutenant Commander Supakarn Sirikanna, a master degree student of Department of Nursing, Faculty of Medicine, Ramathibodi Hospital, Mahidol University. I am doing a research on : "The Relationships of Personal Factors, Social Support, Perception of Maternal Competence, Perception of Newborn Behaviors and Maternal Role Adaptation Primiparous Mothers" for further guidelines in appropriate nursing and qualitative performance.

I would like to ask for research cooperation from all first time mothers to answer my questionnaires which are about of social support, perception of maternal competence, perception of newborn behavior and maternal role adaptation after delivery. There is no setting in the frame of right or wrong concept in the questionnaires given. All will be treated in confidential manner and will be put into this research only. If you are feeling inconvenient, you can deny answering without any effects to the treatment or services that you are receiving.

Thank you in advance for your cooperation.

Lieutenant Commander Supakarn Sirikanna
Master Degree

Are you willing to participate in this research ?

..... Willing

..... Not Willing

APPENDIX B

Personal data

Name, Sirname.....HN.....Delivery date.....

Delivery type.....Address.....

Telephone.....

---

1. Age.....
2. Education level.....
3. Occupation
   - ❑ Housewife
   - ❑ Employee
   - ❑ Officer
   - ❑ Merchant
   - ❑ Others ; please identify.....
4. Family income per month
   - ❑ Sufficient
   - ❑ Insufficient
5. Readiness to have a baby
   - ❑ yes
   - ❑ no
6. Infant care experience
   - ❑ yes (please identify.....)
   - ❑ no

APPENDIX C

Postpartum Support Questionnaire

Context	none	a little	medium	a lot	most
1. Needed help in cooking meals for the family.					
2. Needed to be reassured that I was more than just someone's mother.					
3.					
4.					
.					
.					
.					
33. Needed to have demonstrations of affection and concern, for example, touching, kissing, hugging.					
34. Needed to have others treat me as if I am responsible and competent.					

APPENDIX D

Maternal Competence Perception Questionnaire

Context	strongly agree	agree	mildly agree	disagree	strongly disagree
1. The problems of taking care of a baby are easy to solve once you know how your actions affect your baby, an understanding I have acquired.					
2. Even though being a parent could be rewarding, I am frustated now while my child is only an infant.					
.					
.					
.					
16. Being a parent makes me tense and anxious.					
17. Being a good mother is a reward in itself.					

APPENDIX E

Perception of Newborn Behaviors Questionnaire

Average baby

Although this is your first baby, you probably have some ideas of what most little babies are like.

Please check the level you think best describes the **AVERAGE BABY.**

Context	a great deal	a good bit	moderate amount	very little	none
1. How much crying do you think the average does?					
2. How much trouble do you think the average baby has in feeding ?					
3.					
4.					
5. How much trouble do you think the average baby has in setting down to a predictable pattern of eating and sleeping ?					
6.					

YOUR BABY

You have had a chance to live with your baby for a month now.

Please check the level you think best describes your baby.

Context	a great deal	a good bit	moderate amount	very little	none
1. How much crying has your baby done?					
2. How much trouble has your baby had feeding ?					
3.					
4.					
5.					
6. How much trouble has your baby had in setting down to a predictable pattern of eating and sleeping ?					

APPENDIX F

Maternal Role Adaptation Questionnaire

Context	strongly agree	agree	mildly agree	disagree	strongly disagree
1. I understand by myself that my behaviors affect to my baby which I can resolve the problem in childrearing.					
2. I know that the mothering is award of life, but now I am frustate to infant care.					
.					
.					
.					
32.I have some time to perform acting in my home with family's members during postpartum period.					
33. After delivery, I can perform acting out of home with family's members.					

BIOGRAPHY

NAME	LCDR. Supakarn Sirikarna, WRTN.
DATE OF BIRTH	29 September 1962.
PLACE OF BIRTH	Kanchanaburi, Thailand.
INSTITUTION ATTEND	Naval Nurse College 1981-1985 : Bachelor of Science (Nursing) Mahidol University 1997-2000 : Master of Nursing Science (Maternity and Newborn Nursing)
SCHOLARSHIP	Navy's scholarship
POSITION & OFFICE	Position : Nurse Officer of newborn section Newborn section, Pediatric Division, Somdej Pranangchao Sirikit Hospital, Naval Medical Department, Sattahip Chonburi.