

Factors influencing maternal role performance in transition to being the first-time mother

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Abstract:

Objectives: *To examine the factors influencing maternal role performance including maternal perception of infant behavior, social support, maternal perception of parenting, maternal competence, and depression.*

Design: *A descriptive cross-sectional study*

Materials and methods: *The subjects selected with purposive sampling were 200 first-time mothers at one month postpartum in a regional hospital of the southern region of Thailand who met the inclusion criteria. Data were obtained through one*

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questionnaire related to demographic data of the subjects, and six questionnaires related to study factors including the Neonatal Perception Inventory, the Social Support Scale, the What Being the Parent of a New Baby Is Like Scale, the Parenting Sense of Competence Scale, the Center for Epidemiologic Studies Depression Scale, and the Maternal Role Performance Scale. Multiple regression analysis was used to analyze the data.

Results: The results showed that significant factors influencing maternal role performance of women in transition to being the first-time mother were social support ($\beta=0.261$, $p<.001$), maternal perception of parenting ($\beta=0.248$, $p<.001$), depression ($\beta=-0.206$, $p<.01$), and maternal competence ($\beta=0.180$, $p<.01$). Social support, maternal perception of parenting, maternal competence, and depression explained 34% of the variance in maternal role performance ($R^2=0.340$, $p<.001$).

Conclusions: The findings supported the concept that the Transition Theory is a useful guide for explaining and predicting maternal role performance of women in transition to being the first-time mother. Nurses in postpartum wards and community nurses should have strategies and develop nursing therapeutics to promote social support, improve maternal perception of parenting, increase maternal competence, and decrease depression of first-time mothers in order to enhancing their effective maternal role performance in transition to being the first-time mother.

Key words: maternal role performance, transition, being the first-time mother

บทคัดย่อ:

วัตถุประสงค์: วัตถุประสงค์ของการศึกษาวิจัยครั้งนี้เพื่อตรวจสอบปัจจัยที่มีอิทธิพลต่อการแสดงบทบาทการเป็นมารดา ซึ่งได้แก่ การรับรู้ของมารดาเกี่ยวกับพฤติกรรมของทารก การสนับสนุนทางสังคม การรับรู้ของมารดาเกี่ยวกับการเป็นบิดามารดา ความสามารถในการเป็นมารดา และภาวะซึมเศร้า

แบบวิจัย: การวิจัยเชิงบรรยายแบบตัดขวาง

วัสดุและวิธีการ: กลุ่มตัวอย่างได้มาโดยวิธีการสุ่มตัวอย่างแบบเจาะจง โดยกลุ่มตัวอย่างในการศึกษาวิจัยครั้งนี้เป็นมารดาที่เพิ่งเป็นมารดาครั้งแรก หลังคลอดบุตร 1 เดือน และมีคุณสมบัติครบตามที่กำหนดไว้ในโรงพยาบาลศูนย์แห่งหนึ่งทางภาคใต้ของประเทศไทย จำนวน 200 คน เก็บรวบรวมข้อมูลโดยใช้แบบสอบถามข้อมูลส่วนบุคคล และแบบสอบถามที่เกี่ยวข้องกับปัจจัยที่ศึกษาจำนวน 6 ชุด ได้แก่ แบบสอบถามเรื่องการรับรู้ของมารดาเกี่ยวกับพฤติกรรมทารก แบบสอบถามเรื่องการสนับสนุนทางสังคม แบบสอบถามเรื่องการรับรู้ของมารดาเกี่ยวกับการเป็นบิดามารดา แบบสอบถามเรื่องความสามารถในการเป็นมารดา แบบสอบถามเรื่องภาวะซึมเศร้า และแบบสอบถามเรื่องการแสดงบทบาทการเป็นมารดา วิเคราะห์ข้อมูลโดยใช้สถิติการวิเคราะห์ถดถอยเชิงพหุคูณ

ผลการศึกษา: ผลการวิจัยพบว่าปัจจัยที่มีอิทธิพลต่อการแสดงบทบาทการเป็นมารดาอย่างมีนัยสำคัญทางสถิติของผู้หญิงในการเปลี่ยนผ่านสู่การเป็นมารดาครั้งแรก ได้แก่ การสนับสนุนทางสังคม ($\beta=0.261$, $p<.001$) การรับรู้ของมารดาเกี่ยวกับการเป็นบิดามารดา ($\beta=0.248$, $p<.001$) ภาวะซึมเศร้า ($\beta=-0.206$, $p<.01$) และความสามารถในการเป็นมารดา ($\beta=0.180$, $p<.01$) โดยการสนับสนุนทางสังคม การรับรู้ของมารดาเกี่ยวกับการเป็นบิดามารดา ภาวะซึมเศร้า และความสามารถในการเป็นมารดาสามารถรวมทำนายการแสดงบทบาทการเป็นมารดา ได้ร้อยละ 34 อย่างมีนัยสำคัญทางสถิติ ($R^2=0.340$, $p<.001$)

สรุป: ผลการศึกษาวิจัยครั้งนี้ชี้ให้เห็นว่าแนวคิดในทฤษฎีการเปลี่ยนผ่านสามารถนำมาใช้เป็นแนวทางในการอธิบายและทำนายการแสดงบทบาทการเป็นมารดาของผู้หญิงในระหว่างการเปลี่ยนผ่านสู่การเป็นมารดาครั้งแรกได้ ทั้งนี้พยาบาลในหอผู้ป่วยหลังคลอด และพยาบาลในชุมชนควรมีการกำหนดกลยุทธ์และพัฒนากำหนดทิศทางทางการพยาบาล เพื่อที่จะส่งเสริมการได้รับการสนับสนุนทางสังคม การเพิ่มการรับรู้ของมารดาเกี่ยวกับการเป็นบิดามารดาและความสามารถในการเป็นมารดา และเพื่อลดภาวะซึมเศร้าของมารดาที่เพิ่งเป็นมารดาครั้งแรก เพื่อที่จะส่งผลให้มีการเพิ่มของการแสดงบทบาทการเป็นมารดาที่มีประสิทธิภาพ ในระหว่างการเปลี่ยนผ่านสู่การเป็นมารดาครั้งแรกต่อไป

คำสำคัญ: การแสดงบทบาทการเป็นมารดา, การเปลี่ยนผ่าน, การเป็นมารดาครั้งแรก

Introduction

Mothering issues remain a focus of major public concern because of their impact on maternal and child health.¹ First childbirth mothers were officially reported to increase in recent years: 42.4%, 43.4% and 45.2% in year 2000, 2001, and 2002 respectively.² The study revealed that first-time mothers rated their maternal role stress at one month postpartum at fairly high level.³ Nana's study⁴ found that 20.8% of one-month postpartum mothers had a mental health problem. These Thai women face problems in transition to being the first-time mother. To develop appropriate strategies for supporting and improving maternal role performance of Thai women in transition to being the first-time mother, nurses need to comprehend the factors influencing maternal role performance.

After the first childbirth, women are in transition to being the first-time mother.⁵ They have to undergo role function adaptation to their new maternal role.⁶ As for the maternal role, first-time mothers must develop a good relationship with their infants and be able to adjust themselves to childrearing. They have to understand their infants' behaviors so that they can respond to their infants' needs suitably. At the same time, they have to maintain their functions as wife and worker.⁷⁻⁸ First-time mothers do not naturally adapt to their new maternal role performance during the early postpartum period. They need to learn and adjust continuously. They must use their potential and abilities to adjust their physical, psychological and social states in order to fit into the maternal role.⁹ First-time mothers who progress in transition to being the mother will have mastery in maternal role performance including confidence in their ability to care for the infants, attachment to the infants, and satisfaction in the maternal role.¹⁰ Maternal role performance influences infant outcome by enabling the infant to have normal development.¹¹

According to Transition Theory, transition conditions are factors explaining the transition experience of individuals as easy or difficult during transition process and which influence the transition outcome. Transition conditions include environment, meaning, level of knowledge and skill, and emotional state.⁵ In this study, maternal perception of infant behavior

and social support were proposed as environment. Maternal perception of parenting, maternal competence, and depression were proposed as meaning, level of knowledge and skill, emotional state, respectively.

Infants have their proper behaviors such as feeding, crying, sleeping, and eliminating. First-time mothers have to learn, understand, and perceive their infant behaviors so that they can respond to their infants' needs suitably, for example when an infant is hungry or crying.¹² Maternal perception of infant behavior was found to be positively related to maternal confidence in performing the maternal role.¹³

Social support has been defined as the helpful environment resources outside the person that help individuals during a transition process.⁵ Supports that first-time mothers receive from people around them can directly enhance their health and well-being because they help to meet important human needs, directly reduce interpersonal pressures or tension, and promote affiliation and accurate appraisal of the self and environment.¹⁴ First-time mothers who had high social support were found to also have high maternal role performance.¹⁵

Maternal perception of parenting refers to first-time mothers giving the meaning of their experiences in parenting. First-time mothers who appraise their experiences in parenting as positive will have an easier transition.⁶ Maternal perception of parenting in first-time mothers was found to be positively associated with maternal confidence in performing the maternal role.¹⁶

Maternal competence is developed when mothers have the knowledge and skill of infant care required for the maternal role.¹⁷ First-time mothers with maternal competence will provide skillful and sensitive care that responds to infants' needs and fosters infant development. Maternal competence in first-time mothers was found to be positively related to maternal role performance.¹⁸

Depression is prevalent in postpartum women and is an emotional disturbance including behaviors such as depressed mood, loss of pleasure in activities, inability to sleep, appetite disturbance, lack of concentration, confusion, and obsessive and compulsive behavior. Postpartum depression poses risks to the mother-infant interaction in performing the maternal

role.¹⁹ Depression in first-time mothers was found to have a significantly negative effect on maternal role performance.²⁰

The current study was conducted to examine the factors influencing maternal role performance including maternal perception of infant behavior, social support, maternal perception of parenting, maternal competence, and depression. The study findings can serve as the basic knowledge necessary in developing the nursing therapeutics to promote effective maternal role performance of women in transition to being the first-time mother.

Materials and methods

This study was a descriptive cross-sectional design. The subjects selected with purposive sampling were 200 first-time mothers at one month postpartum in a regional hospital of the southern region of Thailand. The inclusion criteria of the subjects were age at least 18 years, normal delivery, no history of complication after delivery, no history of prenatal depression, and giving birth to a healthy normal full-term infant with weight over 2,500 grams. The sample size was based on the criterion that each independent variable must have at least thirty cases as the minimum numbers of subjects.²¹

Data were obtained through one questionnaire related to demographic data of the subjects, and six questionnaires related to study factors completed by the subjects. Demographic data questionnaire included items asking about age, religion, education, occupation, family income, type of family, attendance at an antenatal care clinic, and sources of infant care knowledge of the subjects. Questionnaires related to study factors were the Neonatal Perception Inventory,²² the Social Support Scale,²³ the What Being the Parent of a New Baby Is Like Scale,²⁴ the Parenting Sense of Competence Scale,²⁵ the Center for Epidemiologic Studies Depression Scale,²⁶ and the Maternal Role Performance Scale²⁷ which measure maternal perception of infant behavior, social support, maternal perception of parenting, maternal competence, depression, and maternal role performance, respectively.

For the validity, the Social Support Scale and the Maternal Role Performance Scale were originally developed in

Thai version and examined for content validity with Thai experts.^{23, 27} The Center for Epidemiologic Studies Depression Scale was translated into a Thai version and examined for the criterion-related validity with Thai people.²⁶ The Neonatal Perception Inventory, the What Being the Parent of a New Baby Is Like Scale, and the Parenting Sense of Competence Scale were originally developed in an English version^{22, 24-25} and translated into a Thai version in this study by using back translation technique. These three Thai-translated questionnaires were examined for cultural applicability by Thai experts.

All six questionnaires were tested for the reliability with 30 first-time mothers prior to the study. The reliability of all six questionnaires was acceptable. The Cronbach's alpha coefficient of the questionnaires measuring maternal perception of infant behavior, social support, maternal perception of parenting, maternal competence, depression, and maternal role performance were 0.83, 0.91, 0.75, 0.73, 0.86, and 0.95, respectively.

Data were analyzed with the SPSS Program Version 11. Demographic data of the subjects were analyzed by frequency and percentage. The relationships among study factors were analyzed using Pearson's product moment correlation. Stepwise multiple regression analysis was used to examine the factors affecting maternal role performance. The assumptions underlying Pearson's product moment correlation and multiple regression analysis were assessed. No violation of the assumptions was found.

Informed consent was obtained from all subjects. All the subjects were assured of confidentiality and the freedom to withdraw from participation at any time. The research was approved by the Institutional Review Board of the Faculty of Nursing, Prince of Songkla University, and the Institutional Review Board of the study hospital.

Results

The age of the subjects ranged from 18 to 39 years with a mean age of 24.34 years (SD=4.42). The majority of the subjects (76%) were Buddhist. For education, one-third of the subjects (34.5%) had completed grade 7-9 and grade

10-12 (29.5%), respectively. Half of the subjects were housewives and the other half worked in variety of occupations. Family income ranged from 3,000 to 50,000 baht/month with a mean income of 9177.10 baht/month (SD= 5641.43). More lived in extended families (58.5%) than in nuclear families (41.5%). Almost all of the subjects (98.5%) had attended an antenatal care clinic. Sources of infant care knowledge of the subjects came from grandmothers and relatives (92.5%) and health care providers (48.5%).

The mean scores of maternal perception of parenting and maternal role performance were at a high level, while the mean scores of social support and maternal competence were at a fairly high level. The mean score of maternal perception of infant behavior was at a moderate level, but the mean score of depression was at a low level (Table 1). In the bivariate

analysis, it was revealed that most of the independent variables were statistically significantly associated with maternal role performance including social support, maternal perception of parenting, maternal competence, and depression (Table 2).

The analysis of stepwise multiple regression as shown in Table 3 revealed that four variables were selected into the predictive model of maternal role performance. There were social support, maternal perception of parenting, maternal competence, and depression. Altogether these four factors explained 34% of the variance in maternal role performance ($R^2=0.340$, $p<.001$). Social support had the largest effect on maternal role performance ($\beta=0.261$, $p<.001$) followed by maternal perception of parenting ($\beta=0.248$, $p<.001$), depression ($\beta=-0.206$, $p<.01$), and maternal competence ($\beta=0.180$, $p<.01$), respectively.

Table 1 Possible scores, actual scores, mean, standard deviation (SD), and level of study factors (N=200)

Factors	Possible scores	Actual scores	Mean	SD	Level
Maternal perception of infant behavior	1-49	20-36	26.81	2.35	moderate
Social support	20-100	51-100	77.46	9.75	fairly high
Maternal perception of parenting	25-125	90-125	108.71	7.57	high
Maternal competence	17-85	50-75	64.12	5.28	fairly high
Depression	0-60	0-23	7.11	3.93	low
Maternal role performance	32-160	118-160	144.97	10.90	high

Table 2 Correlation matrix between independent and dependent variables (N=200)

Factors	MPIB	SS	MPP	MC	D	MRP
MPIB	1					
SS	0.115	1				
MPP	0.041	0.429***	1			
MC	0.095	0.313***	0.166*	1		
D	-0.093	-0.159*	-0.216**	-0.136	1	
MRP	0.062	0.456***	0.434***	0.331***	-0.325***	1

* $p<.05$ ** $p<.01$ *** $p<.001$

MPIB = Maternal perception of infant behavior, SS = Social support,

MPP = Maternal perception of parenting, MC = Maternal competence,

D = Depression, MRP = Maternal Role Performance

Table 3 Stepwise regression analysis for factors predicting maternal role performance (N=200)

Factors	R ²	R ² change	F change	b	SE	β	t
Constant				63.776	11.623		5.487***
SS	0.208	0.208	51.976	0.291	0.074	0.261	3.927***
MPP	0.270	0.070	18.995	0.357	0.093	0.248	3.834***
D	0.314	0.046	13.414	-0.570	0.164	-0.206	-3.463**
MC	0.340	0.029	8.736	0.372	0.126	0.180	2.956**

** p<.01 *** p<.001

SS = Social support, MPP = Maternal perception of parenting,

D = Depression, MC = Maternal competence

Discussion

The mean age of the subjects, which was in the early adult period, was the most suitable for mothering.¹⁷ Most of the subjects had more years of education that helped them for adaptation to performing the new maternal role.⁸ The average family income/month of subjects was similar to the average family income/month of the general southern families.²⁸ More subjects lived in extended families so that subjects could receive support from family members, and grandmothers and relatives were reported as the most common source of their infant care knowledge.

According to the study findings, the strongest factor influencing maternal role performance was social support ($\beta = 0.261$, $p < .001$). This result could be confirmed with the highest relationship between social support and maternal role performance ($r = 0.456$, $p < .001$). This was because the positively perceived supports had been identified as being essential for successful maternal role transition and for the development of confidence in the maternal role of the first-time mothers.⁹ Social support perceived in first-time mothers is classified into many types such as emotional support, informational support, instrumental support, and appraisal support.⁸ Social support enhances the individual's health and well-being by reducing the level of maladaptation and decreasing personal pressure or tension.¹⁴ Therefore, first-time mothers who had higher social support tended to have a higher level of maternal role performance. This finding was

consistent with the result of a previous study¹⁵ and supports the influences of the environment in transition conditions on transition outcome as described in Transition Theory.⁵

The finding showed that maternal perception of parenting had a significantly positive effect on maternal role performance ($\beta = 0.248$, $p < .001$). The first-time mothers who had a higher maternal perception of parenting would have a higher maternal role performance. This was because evaluation and perception of their experience in parenting as positive induced first-time mothers to have a positive attitude toward their parenting and to attempt to perform the maternal role the best they could.⁶ Also, a positive maternal perception of parenting gave the mother greater confidence in performing the maternal role.¹⁶ This finding of maternal perception of parenting influencing maternal role performance supported the concept that the meaning in transition conditions has a positive effect on transition outcomes as described in Transition Theory⁵ and was consistent with the results from a previous study.¹⁶

The results revealed that depression had a significant negative effect on maternal role performance ($\beta = -0.206$, $p < .01$). This was because depression in postpartum mothers posed risks to the relationship between mothers and infants. When a mother was depressed, every aspect of maternal behavior was compromised by less confidence in their ability to care for the infants, less attuned and responsive to their infants, and less satisfaction in the maternal role.¹⁹⁻²⁰ This present finding supports the negative effect of emotional disturbances in transi-

tion conditions on transition outcomes as stated in Transition Theory⁵ and was consistent with the results of a previous study.²⁰

In addition, the finding showed that maternal competence had the smallest significant positive effect on maternal role performance ($\beta=0.180$, $p<.01$). Having sufficient knowledge and skill of infant care required in the maternal role contributed to first-time mothers' confidence in their maternal behaviors. First-time mothers with higher maternal competence demonstrated initiating their infants shortly after childbirth, understanding infant cues, and providing the infant care that effectively responded to the infants' needs.¹⁷⁻¹⁸ This finding supported the concept that the level of knowledge and skill in transition conditions has a positive effect on transition outcomes as stated in Transition Theory⁵ and was again consistent with the results of a previous study.¹⁸

However, it was found that maternal perception of infant behavior did not influence on maternal role performance probably because first-time mothers had only taken care their infants for one month. They were in the process of learning infant behaviors and might not have a good comprehension of their infants. Besides, one-month infants did not have complicated behaviors for the first-time mothers to deal with. The principal areas of infant behaviors for one month infants are sleeping, wakefulness and activities such as crying for hunger, anger, and discomfort.²⁹ Therefore, maternal perception of infant behavior did not influence maternal role performance of women in transition to being the first-time mother at one month postpartum.

Conclusions

New mothers would be able to enhance effective maternal role performance in transition to being the first-time mother when they had high social support, high maternal perception of parenting, high maternal competence and low depression. For promoting successful transition to being the first-time mother and enhancing qualitative maternal role performance, nurses should promote social support, improve maternal perception of parenting, increase maternal competence in infant care, and reduce emotional disturbance

such as depression in the first-time mothers. Nurses in post-partum wards should promote social support of first-time mothers by encouraging husbands, grandmothers, and relatives to be involved in the infant care or supporting first-time mothers in adaptation to their new maternal role. For enhancing maternal perception of parenting and maternal competence, nurses should provide the information and advice about parenting, and providing the knowledge of infant care and teaching skill of infant care activities to first-time mothers. For decreasing depression, nurses should provide emotional supports such as empathy, acceptance, and praise to first-time mothers when they are in development or progression of their maternal role, and encourage husbands, grandmothers, and relatives to do so. Community nurses should continuously promote maternal role performance of first-time mothers after they are discharge from hospital. In addition, nurses in an antenatal care clinic should promote and prepare women who are in first pregnancy about the maternal role.

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