# The Number of Infant Feeding Positions and the 6-Month Exclusive Breastfeeding Rates

Pawin Puapornpong MD\*, Kasem Raungrongmorakot MD\*, Wichian Manolerdtewan MD\*, Sukwadee Ketsuwan NS\*\*, Sinutchanan Wongin NS\*\*

\* Department of Obstetrics & Gynecology, Faculty of Medicine, Srinakharinwirot University, Nakhon Nayok, Thailand \*\* Obstetrics & Gynecology Nursing Department, HRH Princess Maha Chakri Sirindhorn Medical Center, Nakhon Nayok, Thailand

**Background:** Appropriate infant feeding positions will help with latching. Good latching will help decrease cracked nipple and complication leading to early breastfeeding cessation.

**Objective:** To investigate the association of the number of infant feeding positions on exclusive breastfeeding during the first six months postpartum period.

Material and Method: The subjects were primiparous women who delivered without complications and intended to breastfeed their newborns at least six months at the HRH Princess Maha Chakri Sririndhorn Medical Center in Nakhon Nayok Province, Thailand, between May 2012 and April 2013. On the first day postpartum, the mothers had received instructions on four infant feeding positions. These included the cradle, cross cradle, football carry, and side-lying positions, and all were practiced. The mothers were assessed on their use of the numbers of infant feeding positions at the second day postpartum prior to their discharge. Telephone follow-ups at the second, fourth, and sixth month postpartum periods were collected and used for exclusive breastfeeding data collection following discharge. Demographic data and exclusive breastfeeding rates were analyzed by Chi-square test, one-way ANOVA test, and relative risk with a 95% confidence interval (CI).

**Results:** Five hundred forty five primiparous women were enrolled in the present study. The data showed that the 6-month exclusive breastfeeding rates of the studied group who could breastfeed by one, two, three, and four positions, had statistically significant differences (p-value <0.05). The relative risks for exclusive breastfeeding rates between the mothers who used two infant breastfeeding positions or more and the mothers who used only one position were 1.68 (95% CI 1.45-1.95) at the 2-month, 1.69 (95% CI 1.38-2.09) at the 4-month, and 1.51 (95% CI 1.18-1.94) at the 6-month postpartum periods.

**Conclusion:** The number of infant breastfeeding positions had an association with the exclusive breastfeeding rates during the six months postpartum period.

Keywords: Infant breastfeeding position, Breastfeeding, Exclusive breastfeeding

J Med Assoc Thai 2015; 98 (11): 1075-81
Full text. e-Journal: http://www.jmatonline.com

Infant feeding position is an important aspect that helps a baby's latching on and the mother's comfort while breastfeeding<sup>(1,2)</sup>. Typically taught positioning of the baby involves holding the baby close to the mother, aligning the ear, shoulder, and hip of baby in line, the head and shoulder of the baby supported, and facing the breast with baby's nose opposite the nipple. Good baby alignment helps to ensure a deep latch and effective sucking. If the baby had inappropriate or difficulty in latching, the baby may attach to only the nipple, causing cracked nipple or severe complications such as mastitis and breast abscesses<sup>(3,4)</sup>. Cracked nipple and other complications results in the cessation

# Correspondence to:

Puapornpong P, Department of Obstetrics & Gynecology, Faculty of Medicine, Srinakharinwirot University, 62 Moo 7, Ongkharak, Nakhon Nayok 26120, Thailand.

Phone: +66-37-395085, Fax: +66-37-395087

E-mail: pawinppp@yahoo.com

of breastfeeding<sup>(1,5,6)</sup>. Thus, if the mother had an appropriate breastfeeding position, it would promote continuous breastfeeding<sup>(2,7)</sup>.

In 2011, a cross-sectional study was done in Libya to assess the correct position, attachment, and effective suckling in the breastfeeding of infants as practiced by mothers attending hospitals. The percentage of poor infant feeding positioning was found at 8.9 to 24.0%. It is recommended that each mother should be observed for mother's and infant's positioning and attachment at the onset of breastfeeding, and, if needed, counseling should be given on correct positioning and attachment<sup>(7)</sup>.

In Thailand, infant feeding position teaching is a common routine breastfeeding practice in the postpartum ward. Health professionals will help the mother to learn to position and attach her baby for successful breastfeeding<sup>(8)</sup>. The four infant feeding

positions, the cradle, the cross cradle, football carry, and side-lying positions are commonly used. Because the majority of mothers are discharged at the second day postpartum, the number of infant feeding positions in which mothers can practice are limited. The previous study about the importance of the number of infant feeding position that the mother can use before discharge is lacking this information. Thus, we were interested in the association between the number of infant feeding positions at postpartum and the exclusive breastfeeding rates during the six months postpartum period.

# Material and Method Design

The present study was a prospective cohort study. The nurses taught the mothers, four infant feeding positions at postpartum. The mothers were assessed on the number of infant feeding positions and latch scores at postpartum day 2 for short-term evaluation. We used telephone follow-up to find the exclusive breastfeeding rates at the 2-, 4-, and 6-month postpartum after discharge for long-term evaluation.

## Setting

The study was performed in Nakhon Nayok Province, Thailand. The data was collected between May 2012 and April 2013 at the HRH Princess Maha Chakri Sririndhorn Medical Center, which had a baby friendly hospital policy. As part of the routine practice of postpartum ward was breastfeeding teaching. The one-hour learning course on breastfeeding included latching and four infant feeding positions. This was taught on the first day postpartum. One nurse taught groups of three to five mothers. The mothers were encouraged to stimulate their newborns for breastfeeding every two to three hours. The mothers were assessed for latch scores at the second day postpartum, prior to their discharge.

# Inclusion criteria

The primiparous women who delivered without complications, i.e., multiple pregnancies, preeclampsia, antepartum hemorrhage, and preterm labor, and intended to breastfeed six months at least were recruited. Their newborns' birth weights were more than 2,500 grams with no complications.

# Exclusion criteria

The women who had postpartum hemorrhages or any contraindications to breastfeeding including

mothers who were HIV positive and babies with galactosemia.

### Sample size

The sample size was based on 0.05 of error, 0.95 of power, df = 5, and effect size = 0.2 (the sample different ratio was 0.1 from the pilot study of 50 cases). The calculated sample size was 495. Ten percent was added on for the lost to follow-up. Therefore, we collected 545 cases.

#### Latch score

Latch scores were assessed by latching on, audible swallowing, type of nipples, comfort, and assistance requirement parameters. The criteria of 'latching on' scores were 2 for the baby grasps breast, tongue down and forward, lips flanged and had rhythmic suckling, 1 for the baby repeated attempts or the mother must hold nipple in month or must stimulate to suck, and 0 for the baby was too sleepy or reluctant or no latch obtained. The criteria of 'audible swallowing' scores were 2 for spontaneous or frequent audible swallowing, 1 for a few audible swallowing with stimulation, and 0 for none. The criteria of 'type of nipples' scores were 2 for everted (after stimulation), 1 for flat, and 0 for inverted. The criteria of 'comfort' scores were 2 for soft, tender, and intact nipples (no damage), 1 for filling, small blisters or bruises of breasts or mother complains of pinching or mild to moderate discomfort of nipples or breasts. The criteria of 'assistance requirement' scores were 2 for no assistance requirement from staff or the mother could position or hold the baby, 1 for minimal assistance, taught one side and the mother did other or staff helps and mother took over feeding, and 0 for full assistance or staff held infant at breast<sup>(9)</sup>.

# Procedure and collection of material

On the first day postpartum, the mothers received instructions of latching on and four infant feeding positions including the cradle, cross cradle, football carry, and side-lying positions. They were given the opportunity to practice in the one-hour course. One nurse taught groups of three to five mothers. The mothers were encouraged to stimulate their newborns for breastfeeding every two or three hours. Another team of the well-trained nurses assessed latch scores and the numbers of infant feeding positions that the mother could do at the second day postpartum prior to their discharge. The assessment team had five nurses who passed the 12 hours course, two hours for the

knowledge teaching and the detail of agreement and 10 hours for the practice and assessment. Telephone follow-ups by three nurses of breastfeeding clinic at the 2-, 4-, and 6-month postpartum, following discharge, were used for exclusive breastfeeding information and the cause of breastfeeding cessation if it was the case. All data was collected. The question on telephone was 'Did the mother feed her infant only breast milk after discharge?'. If the mother answered 'Yes', exclusive breastfeeding data was collected. If the mother answered 'No', the second question 'What was the cause of exclusive breastfeeding cessation?' would be asked and the data was collected.

# Ethical considerations

The present study was approved by the Ethical Committee of the Faculty of Medicine, Srinakharinwirot University. The number of ethical approval document was SWUEC/E-043/2557.

# Statistical analysis

Demographic data were reported as mean, standard deviation (SD), number, and percentage. We used one-way of ANOVA test to compare the means of maternal age, gestational age, blood loss, body mass index, nipple length, and birth weight between one, two, three, and four breastfeeding position groups. We used Chi-square test to compare the data of occupation, route of delivery, latch scores, and exclusive breastfeeding rates between one, two, three, and four

breastfeeding position groups. Relative risks with a 95% confidence interval were used for comparison exclusive breastfeeding rates of two or more position group with one position group. The cause of breastfeeding cessation was reported as percentages. A *p*-value less than 0.05 was considered statistically significant. Statistical analysis was performed using SPSS version 19.0 IBM Singapore Pte Ltd. (Registration No.1975-01566-C).

#### Results

Five hundred forty five primiparous women were enrolled in the present research project. We categorized mothers with the capability to breastfeed by the number of positions at the second day postpartum into four groups: one, two, three, and four positions used. The percentages of mothers with the capability to breastfeed by one, two, three, and four positions were 40.0%, 34.1%, 18.0%, and 7.9% respectively. The demographic data and latch score of the 'one', 'two', 'three', and 'four' breastfeeding position groups were presented in Table 1.

There were significant differences in the exclusive breastfeeding rates between one, two, three, and four breastfeeding position groups at 2-, 4-, and 6-month postpartum. The relative risks between the exclusive breastfeeding rates of the breastfeeding groups greater than or equal 'two' as compared with the 'one' breastfeeding position group were 1.68 (95% CI 1.45-1.95) at 2-month, 1.69 (95% CI 1.38-2.09)

Table 1. Demographic data of the one, two, three, and four breastfeeding position groups

Mother and newborn's data	One breastfeeding position	Two breastfeeding position	Three breastfeeding position	Four breastfeeding position	<i>p</i> -value
Number of mother, n (%)	218 (40.0)	186 (34.1)	98 (18.0)	43 (7.9)	
Mother's age (years), mean $\pm$ SD	25.9±8.7	25.3±8.8	25.2±9.1	26.0±9.3	0.782
Gestational age (week), mean $\pm$ SD	38.9±1.4	38.8±1.5	38.1±1.0	38.9±1.5	0.645
Occupation, n (%) Housewife or self-employed Employee	126 (57.8) 92 (42.2)	96 (51.6) 90 (48.4)	66 (67.3) 32 (32.7)	25 (58.1) 18 (41.9)	0.142
Delivery, n (%)  Normal delivery  Cesarean section	113 (51.8) 105 (48.2)	104 (55.9) 82 (44.1)	54 (55.1) 44 (44.9)	24 (55.8) 19 (44.2)	0.653
Blood loss (ml), mean $\pm$ SD	413.2±268.5	378.0±276.9	398.1±312.8	369.8±311.6	0.387
Body mass index (kg/m <sup>2</sup> ), mean $\pm$ SD	25.4±4.3	25.5±5.2	25.1±4.4	25.6±4.2	0.840
Nipple length (cm), mean $\pm$ SD	$0.8\pm0.2$	$0.8\pm0.3$	$0.7\pm0.2$	$0.7\pm0.2$	0.493
Birth weight (g), mean $\pm$ SD	3,021.8±455.2	3,020.5±412.5	3,074.9±413.8	2,998.3±376.9	0.493
Latch score >8, n (%)	69 (31.7)	61 (32.8)	30 (30.6)	14 (32.6)	0.665

at 4-month, and 1.51 (95% CI 1.18-1.94) at 6-month postpartum. The details of exclusive breastfeeding rates, relative risks of exclusive breastfeeding rates at 2-, 4-, and 6-month postpartum in the greater than or equal 'two' breastfeeding positions groups as compared to the 'one' breastfeeding position group are presented in Table 2 and 3.

The causes of breastfeeding cessation were mother's return to work, insufficient milk, mother's or

infant's illness, mother exhaustion, and infant excessive crying concern. The details of causes of breastfeeding cessation were presented in Table 4.

## **Discussion**

At the second day postpartum, mothers who could breastfeed by one position had shown the greatest percentage (40.0%) in the present study. The mothers were taught and practiced breastfeeding at the first day

Table 2. Comparison of the exclusive breastfeeding rates in one, two, three and four breastfeeding position groups

Exclusive breastfeeding rate	Number of mother	One breastfeeding position	Two breastfeeding position	Three breastfeeding position	Four breastfeeding position	<i>p</i> -value
2-month, n (%)	540	86 (40.0)	126 (68.9)	64 (65.3)	29 (67.4)	<0.001*
4-month, n (%)	538	60 (27.9)	91 (49.7)	46 (47.9)	22 (51.2)	<0.001*
6-month, n (%)	537	47 (21.8)	65 (35.5)	34 (35.4)	13 (30.9)	0.002*

<sup>\*</sup> Statistical significance, p<0.05

**Table 3.** The relative risks of the exclusive breastfeeding rates of ≥2 breastfeeding position group compare with one breastfeeding position group

EBF rate of ≥2 compare with 1 breastfeeding positions	RR	95% CI	<i>p</i> -value
2-month	1.68	1.45-1.95	<0.001*
4-month	1.69	1.38-2.09	<0.001*
6-month	1.51	1.18-1.94	0.01*

EBF = exclusive breastfeeding; RR = relative risk; CI = confidence interval

Table 4. Cause of breastfeeding cessation in one, two, three and four breastfeeding position groups

Cause of breastfeeding cessation	One breastfeeding position	Two breastfeeding position	Three breastfeeding position	Four breastfeeding position
2-month, n (%)	129	57	34	14
Return to work	39 (30.2)	18 (31.6)	11 (32.4)	5 (35.7)
Insufficient milk	37 (28.7)	14 (24.6)	9 (26.5)	4 (28.6)
Mother's or infant's illness	13 (10.0)	10 (17.5)	8 (23.5)	3 (21.4)
Mother exhaustion	29 (22.5)	8 (14.0)	4 (11.8)	1 (7.1)
Infant crying concern	11 (8.5)	7 (12.3)	2 (5.9)	1 (7.1)
4-month, n (%)	155	92	50	21
Return to work	89 (57.4)	55 (59.8)	31 (62.0)	13 (61.9)
Insufficient milk	37 (23.9)	23 (25.0)	11 (22.0)	5 (23.8)
Mother's or infant's illness	15 (9.7)	10 (10.9)	5 (10.0)	2 (9.5)
Mother exhaustion	8 (5.2)	2 (2.2)	2 (4.0)	0 (0.0)
Infant crying concern	6 (3.8)	2 (2.2)	1 (2.0)	1 (4.8)
6-month, n (%)	168	118	62	29
Return to work	100 (59.5)	74 (62.7)	39 (62.9)	18 (62.1)
Insufficient milk	16 (9.5)	13 (11.0)	7 (11.3)	5 (17.2)
Mother's or infant's illness	32 (19.0)	23 (19.5)	10 (16.1)	4 (13.8)
Mother exhaustion	12 (7.1)	5 (4.2)	4 (6.5)	1 (3.4)
Infant crying concern	8 (4.8)	3 (2.5)	2 (3.2)	1 (3.4)

<sup>\*</sup> Statistical significance, *p*<0.05

and then were assessed for the number of breastfeeding positions used at the second day postpartum. It was possible that the 'one hour' duration of practice might have been too short; more time for mother to practice would be needed. However, currently, doctors discharge mother and child early. Therefore, the mother should receive more of the health professionals' attention and should be closely followed-up in those few days to encourage her to practice more appropriate breastfeeding positions. The recent study about assessing the correct breastfeeding position, attachment, and effective suckling in the infants showed that young and primiparous mothers needed more support and guidance for appropriate breastfeeding techniques<sup>(7)</sup>. The cesarean section rates in the present study were high (44.1 to 48.2%)<sup>(10)</sup> and delivery by cesarean section might have an effect on the practice of breastfeeding(11-13).

No significant differences between the four breastfeeding position groups were observed in terms of the demographic data in regard to the maternal age, gestational age, occupation, route of delivery, blood loss, body mass index, nipple length, the newborns' birth weights, and latch scores. Exclusive breastfeeding rates between these groups at 2-month, 4-month, and 6-month postpartum had shown statistically significant differences. From data analysis, the results had shown that the greater number of infant feeding positions used affected the exclusive breastfeeding rates. When the mother used only one position to breastfeed her infant, within 24 hours, the mother had to feed her infant 8 to 14 times and each time spent approximately 20 to 30 minutes<sup>(1,14)</sup>. We hypothesized that the mother might be tired and developed muscle strains, because maternal exhaustion was one of the breastfeeding cessation causes. The percentage of mother exhaustion in one position group had a tendency to be higher than the other groups. On the other hand, if the mother had the capability to breastfeed with greater number of positions, she should get more choices for the promotion of comfort and maintaining appropriate activities in her daily life. This might help the mother comply with breastfeeding for a longer duration.

However, the exclusive breastfeeding rate had shown to decrease over time, significantly in the sixth month. The factor that was important in the postpartum period was the mother's need to return to work<sup>(15)</sup>. The mother should be taught how to express her milk and store it during her work hours, so that the mother could continue to breastfeed for at least the first six months.

When the groupings were analyzed by 'one' and greater than or equal 'two' breastfeeding positions, the relative risk between the exclusive breastfeeding rates of the greater than or equal 'two' breastfeeding positions group compared with the 'one' breastfeeding position group was 1.5 to 1.7 during the six months postpartum period. The data indicates that the effects of the infant feeding position on breastfeeding had shown greater benefits during the first period. This information will be useful in educating the mothers and healthcare professionals and in determining and planning practice sessions for the postpartum mothers. Teaching and practicing breastfeeding positions prior to the mothers' discharge allows the breastfeeding care team to assess whether the mothers can breastfeed in at least two positions.

The present study might be limited by recall bias from telephone follow-up. However, the nurses explained exclusive breastfeeding definition and gave mothers the leaflet of definition of exclusive breastfeeding before maternal discharge. Besides, the comfort levels experienced during each feeding period was not assessed. This could make us understand the effect of the number of infant feeding positions on the continuation of breastfeeding as well.

# Conclusion

The number of infant feeding positions that a mother is able to be taught and has a chance to practice at the second day after birth associates to exclusive breastfeeding rates during the six months postpartum period. The mother who could breastfeed in greater than or equal to 'two' positions was more likely to maintain a 6-month exclusive breastfeeding than the mother who only breastfed in one position as our relative risks have shown as 1.5 to 1.7 fold.

#### What is already known on this topic?

Appropriate infant feeding positions will help with latching. Good latching will help with decreasing cracked nipple and complications causing early breastfeeding cessation.

#### What this study adds?

The number of infant breastfeeding positions had had association with the exclusive breastfeeding rates during the six months postpartum period. The mother who could breastfeed in greater than or equal 'two' positions was more likely to maintain a 6-month exclusive breastfeeding than the mother who only

breastfed in one position as our relative risks had shown as 1.5 to 1.7 fold.

# Acknowledgment

We thank to the HRH Princess Maha Chakri Sririndhorn Medical Center and the Faculty of Medicine, Srinakharinwirot University for supporting our research.

#### Potential conflicts of interest

None.

#### References

- Eglash A, Montgomery A, Wood J. Breastfeeding. Dis Mon 2008; 54: 343-411.
- Ingram J, Johnson D, Greenwood R. Breastfeeding in Bristol: teaching good positioning, and support from fathers and families. Midwifery 2002; 18: 87-101.
- Morland-Schultz K, Hill PD. Prevention of and therapies for nipple pain: a systematic review. J Obstet Gynecol Neonatal Nurs 2005; 34: 428-37.
- Joanna Briggs Institute. The management of nipple pain and/or trauma associated with breastfeeding. Aust Nurs J 2009; 17: 32-5.
- Odom EC, Li R, Scanlon KS, Perrine CG, Grummer-Strawn L. Reasons for earlier than desired cessation of breastfeeding. Pediatrics 2013; 131: e726-32.
- 6. Lewallen LP, Dick MJ, Flowers J, Powell W, Zickefoose KT, Wall YG, et al. Breastfeeding support and early cessation. J Obstet Gynecol Neonatal Nurs 2006; 35: 166-72.
- 7. Goyal RC, Banginwar AS, Ziyo F, Toweir AA.

- Breastfeeding practices: Positioning, attachment (latch-on) and effective suckling a hospital-based study in Libya. J Family Community Med 2011; 18: 74-9.
- Law SM, Dunn OM, Wallace LM, Inch SA. Breastfeeding Best Start study: training midwives in a 'hands off' positioning and attachment intervention. Matern Child Nutr 2007; 3: 194-205.
- 9. Jensen D, Wallace S, Kelsay P. LATCH: a breastfeeding charting system and documentation tool. J Obstet Gynecol Neonatal Nurs 1994; 23: 27-32.
- 10. Phadungkiatwattana P, Tongsakul N. Analyzing the impact of private service on the cesarean section rate in public hospital Thailand. Arch Gynecol Obstet 2011; 284: 1375-9.
- 11. Dennis CL. Breastfeeding initiation and duration: a 1990-2000 literature review. J Obstet Gynecol Neonatal Nurs 2002; 31: 12-32.
- Scott JA, Landers MC, Hughes RM, Binns CW. Factors associated with breastfeeding at discharge and duration of breastfeeding. J Paediatr Child Health 2001; 37: 254-61.
- 13. Cernadas JM, Noceda G, Barrera L, Martinez AM, Garsd A. Maternal and perinatal factors influencing the duration of exclusive breastfeeding during the first 6 months of life. J Hum Lact 2003; 19: 136-44.
- Kent JC, Mitoulas LR, Cregan MD, Ramsay DT, Doherty DA, Hartmann PE. Volume and frequency of breastfeedings and fat content of breast milk throughout the day. Pediatrics 2006; 117: e387-95.
- 15. Olang B, Heidarzadeh A, Strandvik B, Yngve A. Reasons given by mothers for discontinuing breastfeeding in Iran. Int Breastfeed J 2012; 7: 7.

# จำนวนท่าในการให้นมลูกกับอัตราการเลี้ยงลูกด้วยนมแม่อย่างเดียวหกเดือนหลังคลอด

# ภาวิน พัวพรพงษ์, เกษม เรื่องรองมรกต, วิเชียร มโนเลิศเทวัญ, สุขวดี เกษสุวรรณ, ศิณัฐชานันท์ วงษ์อินทร์

ภูมิหลัง: ท่าในการให้นมลูกที่เหมาะสมจะช่วยในการเข้าเต้า และการเข้าเต้าที่ดีจะช่วยลดปัญหาการเจ็บหัวนมและภาวะแทรกซ้อน ที่จะนำไปสู่การหยุดการเลี้ยงลูกด้วยนมแม่ก่อนเวลาอันควร

<mark>วัตถุประสงค์:</mark> ศึกษาผลของจำนวนท่าที่มารดาสามารถปฏิบัติได้หลังคลอดกับอัตราการเลี้ยงลูกด้วยนมแม่อย่างเดียวในช่วงระยะเวลา หกเดือน

วัสดุและวิธีการ: ศึกษามารดาครรภ์แรกหลังคลอดที่ไม่มีภาวะแทรกซ้อนและทารกแรกเกิดที่โรงพยาบาลศูนย์การแพทย์ สมเด็จพระเทพรัตนราชสุดา ฯ สยามบรมราชกุมารี อำเภอองครักษ์ จังหวัดนครนายก ประเทศไทย ตั้งแต่ เดือนพฤษภาคม พ.ศ. 2555 ถึง เมษายน พ.ศ. 2556 จำนวนทั้งสิ้น 545 ราย โดยในวันแรกหลังคลอดทำการสอนท่าในการให้นมลูกพร้อมให้มารดา ฝึกปฏิบัติ 4 ท่า ได้แก่ cradle, cross cradle, football และ side-lying หลังจากนั้นจะมีการประเมินจำนวนท่าให้นมลูก ที่มารดาสามารถให้นมลูกได้ในวันที่สองหลังคลอดก่อนกลับบ้าน และโทรศัพท์ติดตามสอบถามมารดาถึงการเลี้ยงลูกด้วยนมแม่ อย่างเดียวในช่วง 2 เดือน 4 เดือน และ 6 เดือน หลังคลอด เก็บข้อมูลที่ได้นำมาวิเคราะห์หาผลของจำนวนท่าที่ให้นมลูกของมารดา กับอัตราการเลี้ยงลูกด้วยนมแม่อย่างเดียวหลังคลอดหกเดือน โดยสถิติที่ใช้ได้แก่ Chi-square, one-way ANOVA, relative risk และช่วงความเชื่อมั่นร้อยละ 95

ผลการศึกษา: อัตราการเลี้ยงถูกด้วยนมแม่ในกลุ่มมารดาที่ให้นมได้ 1, 2, 3 และ 4 ท่า ที่ 2 เดือน 4 เดือน และ 6 เดือน หลังคลอด พบมีความแตกต่างกันอย่างมีนัยสำคัญ (p-value <0.05) และอัตราการเลี้ยงถูกด้วยนมแม่อย่างเดียวในกลุ่มมารดาที่ให้นมได้ มากกว่า 2 ท่า ขึ้นไป มากกว่ากลุ่มมารดาที่ให้นมได้ 1 ท่า 1.68 เท่า (ช่วงความเชื่อมั่นร้อยละ 95 เท่ากับ 1.45-1.95) ที่ 2 เดือน 1.69 เท่า (ช่วงความเชื่อมั่นร้อยละ 95 เท่ากับ 1.18-1.94) ที่ 6 เดือน หลังคลอด

สรุป: จำนวนท่าที่มารดาสามารถปฏิบัติได้หลังคลอดมีความสัมพันธ์กับอัตราการเลี้ยงลูกด้วยนมแม่อย่างเดียวในช่วงระยะเวลา หกเดือน