



Assessment of Breastfeeding at Angthong Hospital

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Abstract

Background: Breast milk is a valuable nutrition for newborns. Angthong Hospital has been promoting breastfeeding among new mothers. In Thailand, the duration of breastfeeding declined. At present, the government has carried out major initiatives to promote good breastfeeding practices and policies under Maternal and Child Health in the Eight National Economic and Social Development Plan, which ended in 2001. The goal of the promotion, protection and support of breastfeeding is to empower and enable women to increase the proportion of breastfeed exclusively for about the first 4 months to 30%, but only 16.3% of them practiced exclusively breastfeeding and 28.4% were found to use combined feeding e.g. breast and bottle feeding.⁽¹⁶⁾ Angthong Public health office have a policy which follow the assignment of Health Department to promote breastfeeding and maintain of standard for breastfeeding. Angthong Hospital comply with the policy and has been promoting breastfeeding among.

Objective: This descriptive study aimed to evaluate the success in breastfeeding in Angthong Hospital.

Methods: The study included 430 postpartum women who delivered their babies in Angthong Hospital during May to August 2008. Data was collected by interviewing women with structured questionnaires and observing their breastfeeding activities at 2 hrs. and 2 days postpartum, respectively. The descriptive statistics included number, rate, mean and standard deviation. The chi-square test was used to test hypotheses at the significant level of $\alpha = 0.05$ by using SPSS/version 11.5.

Results: The results showed that only 37.7% of woman succeeded in breastfeeding with a LATCH score >7 at 2 hours postpartum. The success rate was 94.0% at 2 days postpartum. Latching between mouth and nipple was correct in 49.3% of women at 2 hours postpartum and increased to 98.1% at 2 days postpartum, the sound of suckling was distinct in 10.2% of women at 2 hours postpartum which increased to 86% of women at 2 days postpartum, the holding position of babies during breastfeeding was correct in 15.6% of women 2 hours postpartum which increased to 48.4% at 2 days postpartum. The only factor which was significantly associated with the success in breastfeeding was the type of delivery.

Conclusion: The success in breastfeeding increases with time during the postpartum period. Vaginal delivery resulted in more successful breastfeeding than caesarean section. Therefore, unnecessary caesarean section should be avoided. Dissemination of knowledge with proper practice of breastfeeding should be promoted for more success in breastfeeding.

Key Words: Breastfeeding.

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Introduction

Breast milk is the most ideal natural food for infants it is because not only easy to be digested and absorbed, but it also contains abundant antibodies and immune cells. It provides not only the best possible nutrition but also confers healthy immunity via anti-infective constituents in colostrums and breast milk.⁽¹⁻³⁾ Babies who were breastfeed have more Intelligence Quotient than babies were not. Mother who breastfeed their babies also embrace, touch and talk to their babies which result in better development of babies.

In Thailand, the duration of breastfeeding declined. The Thai government has currently carried out major initiatives to promote good breastfeeding practices and policies under Maternal and Child Health in the Eight National Economic and Social Development Plan, which was already ended in 2001. The goal of the promotion, protection and support of breastfeeding is to empower and enable women to increase the proportion of breastfeed exclusively for about the first 4 months to 30%, but only 16.3% of them practiced exclusively breastfeeding and 28.4% were found to use combined feeding such as breast and bottle feeding.

Angthong Public Health office has a policy that follow the assignment of Thai Health Department to promote breastfeeding and maintain of standard for breastfeeding. Angthong Hospital complice with the policy and has been promoting breastfeeding among. The objective of the study were to study the success of breastfeeding for postpartum women who delivered their babies in Angthong Hospital and to study factors demographic of postpartum women and pregnancy characteristic associated with factors-success in breastfeeding and flow of milk in Angthong Hospital.

Material and Methods

This research was a descriptive study. The instrument used in data collection was a question-

naire developed by the researcher based on the review of related literature. The questionnaires were validated by experts. The part of assessment of breastfeeding and flow of breast milk: consisted of assessment of LATCH score and flow of breast milk at 2 hours postpartum and 2 days postpartum of postpartum women. LATCH score is a breastfeeding charting system that provides a systematic method for gathering information about individual breastfeeding sessions. The system assigns a numerical score 0 1 or 2 to five key components of breastfeeding. Each letter of the acronym LATCH denotes an area of assessment. L is for how well the infant latches onto the breast, A is for the amount of audible swallowing noted, T is for the mother's nipple type, C is for the mother's level of comfort, H is for the amount of help the mother needs to hold her infant to the breast. The flow of milk is amount of breast milk of postpartum women. Flow of milk is amount of breast milk of postpartum women.

Scope and limitation of the study

In the research, study samples are purposively among post-partum women who delivered in gestational age ≥ 37 weeks or birth weight of newborn at $\geq 2,500$ grams. This study collected the data by asking post-partum women who were admitted into Obstetrics ward, Angthong Hospital. Data were collected by structured questionnaire interviews at post-partum ward. Four hundred thirty post-partum women were recruited purposively according to the inclusion criteria during May 2008 - August 2008.

Research design

This research was a descriptive study which studied factor associated with success in breastfeeding at Angthong Hospital.

Results

Postpartum women's ages ranged from 14 to



42 years old. The largest groups (26.3%) were between 25 and 29 years old. The second largest groups (40.0%) were between 14 and 24 years old. The average age of postpartum women was 26.21 ± 6.111 years. Fifty - nine percent of postpartum women were graduated from secondary education. Fifty-four percent were employees. Postpartum women had a monthly income ranging from 2,000 to 90,000 baht. The largest group (57.4%) had an income between 5,001 to 10,000 baht per month. The mean monthly income was $12,124.19 \pm 10,692.422$ baht. Most of the postpartum women came to first antenatal visit at 13 weeks or less (49.8%). The average gestation age at first antenatal visit was 9.45 ± 3.539 weeks. Most of the postpartum women came to first antenatal visit at 4 times or more (92.1%). The mean number of antenatal visit was 9.45 ± 3.539 times. Most of the postpartum women to parity at 2 times or more (59.1 %). The average times of parity was 1.87 ± 0.980 times. Most of postpartum women lead vagina delivery (53.3 %) while 46.7% had caesarean section.

Birth weight of newborn were ranging from 2,060 to 4,480 grams. Most of infant (46.3%) weight between 3,001 to 3,500 grams. The mean birth weight of infant was $3,122.37 \pm 402.674$ grams. Infant APGAR score were score at 6 to 10. Most of infant (98.9%) had APGAR score between 8 and 10. The mean score of infant was 9.00 ± 0.398 . Infant APGAR score were score at 9 to 10. Most of infant (99.5%) had APGAR score at 10. The mean score of infant was 10.00 ± 0.068 .

- Latching between mouth and nipple. At 2 hours to 49.3% of women was right and 2 days postpartum. At 98.1% of women was right and wrong to 1.9% 2 days postpartum.

- Sound of suckling was clearly heard among 10.2% of women 2 hours postpartum. At sound of suckling was clearly heard among 86.0% 2 days postpartum.

- Nipple type was normal to 89.3% and abnormal to 10.7% among women at 2 hours postpartum and normal to 90.0% and abnormal to 10.0% when 2 days postpartum.

- Level of comfort 99.8% of women was feel comfortable and 0.2% was not comfort among women at 2 hours postpartum and comfort at 92.6% and not comfort at 7.2% when 2 days postpartum

- Holding position of babies during breastfeeding 15.6% was right at and wrong at 84.4% among women 2 hours postpartum. At 51.6% was right at 2 days and 48.4% was wrong when 2 days postpartum.

- Most of postpartum women (37.7%) had total latch score 8-10 at 2 hours postpartum. Most of postpartum women (95.1%) had total latch score 8-10 at 2 days postpartum.

- Flow of breast milk was good flow at 39.8% had good flow of breast milk at 2 hours postpartum. At 2 days 97.7% had good flow of breast milk.

The analysis of factors associated with success in breastfeeding among post-partum women.

There was a statistically significant association between type of delivery.

Type of delivery

There was a statistically significant association between type of delivery and success in breastfeeding ($p < 0.05$). Postpartum women who vagina delivery had percentage of success of breastfeeding than those who cesarean section.

While the others variable, the association between independent variable and dependent variable had no significant association.

Discussion

In this study, success in breastfeeding of postpartum women at Angthong Hospital were measured

**Table 1** Demographic characteristics of the postpartum women

Characteristics	Number (n= 430)	%
Age(years)		
< 20	70	16.3
20-24	102	23.7
25-29	113	26.3
30 - 34	109	25.3
≥ 35	36	8.4
Mean ± SD = 26.21 ± 6.111 Min = 14, Max = 42		
Education		
No study	2	0.5
Primary education	57	13.3
Secondary education	255	59.3
Vocational education	69	16.2
Diploma	1	0.2
Bachelor's degree	46	10.7
Occupation		
Housewife	143	33.2
Merchant	39	9.1
Employees	233	54.2
Civil servant	15	3.5
Income		
≤ 5,000	54	12.6
5,001-10,000	247	57.4
10,001-20,000	81	18.8
20,001-30,000	24	5.6
> 30,000	24	5.6
Mean ± SD = 12,124.19 ± 10,692.422		
Min = 2,000, Max = 90,000		

Table 2 Antenatal visits and pregnancy characteristic.

Characteristics	Number (n= 430)	%
Parity		
1	176	40.9
2	174	40.5
> 2	80	18.6
Mean ± SD = 1.87 ± 0.980 Min = 1, Max = 8		
Number of antenatal visit		
No ANC	4	0.9
1 - 3	30	7.0
4 - 10	204	47.4
> 10	192	44.7
Mean ± SD = 9.45 ± 3.539 Min = 0, Max = 24		
Gestational age at first antenatal visit (weeks)		
No ANC visit	4	0.9
≤ 13 weeks	214	49.8
14 - 27 weeks	181	42.1
28 - 40 weeks	31	7.2
Mean ± SD = 15.33 ± 7.013 Min = 5, Max = 38		
Type of delivery		
Normal labour	202	47.0
Vacuum extractor	27	6.3
Cesarean section	201	46.7
Weight of infant (grams)		
< 2,500	25	5.8
2,500 - 3,000	131	30.5
3,001 - 3,500	199	46.3
> 3,500	75	17.4
Mean ± SD = 3122.37 ± 402.674		
Min = 2,060, Max = 4,480		

Table 3 Assessment of breastfeeding among postpartum women at 2 hours and 2 days postpartum.

Category of assessment	2 hrs. postpartum		2 days postpartum	
	Number n=430	%	Number n=430	%
Latching between mouth and nipple				
Right	212	49.3	422	98.1
Wrong	218	50.7	8	1.9
Sound of suckling (Audibility)				
Sound clear	44	10.2	370	86.0
Not audible	386	89.8	60	14
Type of nipple				
normal	384	89.3	387	90.0
abnormal	46	10.7	43	10.0
The mother's level of comfort.				
comfort	429	99.8	398	92.6
Not comfort	1	0.2	32	7.4
Holding position of babies (Holding).				
Right	67	15.6	222	51.6
Wrong	363	84.4	208	48.4
Total score				
0 - 3	3	0.7	1	0.2
4 - 7	265	61.6	20	4.7
8 - 10	162	37.7	409	95.1
Flow of breast milk				
Good flow	171	39.8	420	97.7
Not flow or scant	259	60.2	10	2.3

Table 4 Conclusion of factors associated with success in breastfeeding at Angthong Hospital for latching between mouth and nipple.

Factors	Latching between mouth and nipple					
	2 hours postpartum			2 days postpartum		
	X ²	df	p-value	X ²	df	p-value
Age	10.153	4	0.038*	2.192	1	0.139
Education	9.315	3	0.025*	7.750	1	0.005*
Occupation	2.905	1	0.088	1.002	1	0.317
Income	4.069	4	0.397	4.100	1	0.043*
Type of delivery	6.412	1	0.011*	2.614	1	0.106
Weight of infant	1.089	3	0.780	1.994	1	0.158
APGAR Score at 1 minute			0.513**	0.096	1	0.910
Gestational age at first antenatal visit (weeks)	0.461	1	0.497	1.926	1	0.165
Number of antenatal visit	2.294	1	0.112			0.514
Parity	1.942	2	0.379	0.040	1	0.842

* Significant

** Fisher's exact Test

**Table 5** Conclusion of factors associated with success in breastfeeding at Angthong Hospital for sound of suckling.

Factors	Sound of suckling					
	2 hours postpartum			2 days postpartum		
	X ²	df	p-value	X ²	df	p - value
Age	11.053	4	0.026*			0.095**
Education	3.383	1	0.066	1.770	3	0.622
Occupation	0.015	1	0.903	1.031	1	0.310
Income	5.575	1	0.018*	0.369	1	0.544
Type of delivery	3.152	1	0.076	3.762	1	0.052
Weight of infant	2.840	3	0.416	0.127	1	0.710
APGAR Score at 1 minute			0.581**			0.470**
Gestational age at first antenatal visit (weeks)	0.010	1	0.922	3.357	1	0.067
Number of antenatal visit	2.294	1	0.112	0.700	1	0.517
Parity	4.515	2	0.105	1.078	2	0.583

* Significant

** Fisher's exact Test

Table 6 Conclusion of factors associated with success in breastfeeding at Angthong Hospital for type of nipple.

Factors	Normality of nipples					
	2 hours postpartum			2 days postpartum		
	X ²	df	p-value	X ²	df	p-value
Age	0.007	1	0.933	0.054	1	0.816
Education	2.715	3	0.438	0.756	1	0.385
Occupation	0.022	1	0.882	0.004	1	0.948
Income	2.106	4	0.716	0.543	1	0.461
Type of delivery	1.978	1	0.160	0.873	1	0.350
Weight of infant	0.865	3	0.834	0.081	1	0.879
APGAR Score at 1 minute			0.566**			0.589**
Gestational age at first antenatal visit (weeks)	0.940	1	0.279	0.699	1	0.304
Number of antenatal visit	3.274	1	0.089	0.128	1	0.721
Parity	0.075	2	0.963	0.274	1	0.601

** Fisher's exact Test

Table 7 Conclusion of factors associated with success in breastfeeding at Angthong Hospital for comfort during breastfeeding.

Factors	Comfort during breastfeeding					
	2 hours postpartum			2 days postpartum		
	X ²	df	p-value	X ²	df	p-value
Age			0.916**			0.117**
Education			0.117**	0.320	1	0.571
Occupation			0.423**	0.895	1	0.344
Income			0.700**	0.026	1	0.873
Type of delivery			0.533**	1.255	1	0.263
Weight of infant			0.515**	0.378	1	0.496
APGAR Score at 1 minute			0.988**			0.678**
Gestational age at first antenatal visit (weeks)			0.493**	0.426	1	0.514
Number of antenatal visit			0.921**			0.257**
Parity			0.591**	0.177	2	0.915

** Fisher's exact Test

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Table 8 Conclusion of factors associated with success in breastfeeding at Angthong Hospital for holding position of babies during breastfeeding.

Factors	Holding position of babies during breastfeeding					
	2 hours postpartum			2 days postpartum		
	X ²	df	p-value	X ²	df	p-value
Age	3.832	4	0.429	0.812	1	0.368
Education	6.934	3	0.094	5.674	3	0.129
Occupation	0.009	1	0.923	3.116	1	0.078
Income	6.403	4	0.171	0.980	4	0.913
Type of delivery	12.598	1	<0.01*	21.139	1	<0.01*
Weight of infant	4.152	3	0.246	1.941	3	0.585
APGAR Score at 1 minute			0.573**			0.166**
Gestational age at first antenatal visit (weeks)	3.133	1	0.081	2.681	1	0.145
Number of antenatal visit	0.409	1	0.523	0.025	1	0.873
Parity	0.719	2	0.698			0.471**

* Significant

** Fisher's exact Test

**Table 9** Conclusion of factors associated with success in breastfeeding at Angthong Hospital for total score.

Factors	Total score					
	2 hours postpartum			2 days postpartum		
	X ²	df	p-value	X ²	df	p-value
Age	5.251	4	0.263			0.374**
Education	3.648	3	0.302			0.419**
Occupation	0.008	1	0.931			0.152**
Income	2.524	4	0.640			0.458**
Type of delivery	37.560	1	<0.01*			0.015*/**
Weight of infant	5.567	3	0.135	1.167	1	0.258
APGAR Score at 1 minute			0.623**			0.623**
Gestational age at first antenatal visit (weeks)	0.676	1	0.411			0.174**
Number of antenatal visit	7.357	3	0.061			0.371**
Parity	5.367	2	0.068			0.323**

* Significant

** Fisher's exact Test

Table 10 Conclusion of factors associated with success in breastfeeding at Angthong Hospital for flow of breastmilk.

Factors	Flow of breastmilk					
	2 hours postpartum			2 days postpartum		
	X ²	df	p-value	X ²	df	p-value
Age	0.185	4	0.996	0.035	1	0.851
Education	3.797	3	0.284	2.755	1	0.097
Occupation	0.274	1	0.601	4.383	1	0.036*
Income	0.353	4	0.986	4.388	1	0.036*
Type of delivery	9.900	1	<0.01*			0.057**
Weight of infant	1.841	3	0.606	1.921	1	0.254
APGAR Score at 1 minute			0.660**			0.889**
Gestational age at first antenatal visit (weeks)	9.593	2	0.008*	3.517	1	0.061
Number of antenatal visit	0.819	1	0.365	0.062	1	0.804
Parity	7.111	2	0.029*	0.504	1	0.477

* Significant

** Fisher's exact Test



by LATCH score to be > 7 and flow of breast milk at level 3 at 2 hours and at 2 days postpartum. The success rate was 37.7% for LATCH score and 39.8% for flow of breast milk at 2 hours postpartum, success rate was 95.1% for LATCH score and 97.7% for flow of breast milk at 2 days postpartum. The success in breastfeeding increase with time during postpartum period. Vagina delivery resulted in more successful breastfeeding than caesarean section. In this study the success in breastfeeding was significantly associated with type of delivery when tested by chi-square test ($p < 0.05$). Overall, there was no significant associated both demographic factors and success in breastfeeding and flow of breast milk except age with Latch score at 2 hours postpartum, education with Latch score and Audible score at 2 hours postpartum and 2 days postpartum and occupation with flow of breast milk at 2 hours postpartum. There was no significant pregnancy characteristic factors and success in breastfeeding (LATCH score) and flow of breast milk except for type of delivery with Latch score. Parity and gestational age at first antenatal visit were found to be significant with flow of breast milk at 2 hours postpartum. In this study the success in breastfeeding was significantly associated with type of delivery. Vagina delivery resulted in more successful breastfeeding than caesarean section.

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Conclusion

Breast milk is a valuable nutrition for newborn. Babies who were breastfeed have more Intelligence Quotient than babies were not. Mother who breastfeed their babies also embrace, touch and talk to their babies which result in better development of babies. Angthong Public health office has a policy which follow the assignment of Health Department to promote breastfeeding and maintain of standard for breastfeeding. Angthong Hospital complies with the policy and has been promoting breastfeeding among. This descriptive study aimed to evaluate the success of breastfeeding in Angthong Hospital. In conclusion, the success of breastfeeding increase with time during postpartum period. Vagina delivery resulted in more successful breastfeeding than caesarean section. Therefore, unnecessary caesarean section should be avoided. Dissemination of knowledge with proper practice of breastfeeding should be promoted for more success in breastfeeding.

Recommendation

Avoid unnecessary caesarean section. Knowledge of proper holding of babies during breastfeeding should be taught and disseminated. Evaluation and follow-up study of success in breastfeeding at interval 7 days, 14 days, 45 days, 2 months, 4 months and 6 months. Finding definite obstacles to maintain high rate of success in breastfeeding



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