PENINGKATAN SEKRESI KOLOSTRUM DENGAN KONTAK AWAL *SKIN-TO-SKIN* PADA IBU *POSTPARTUM*

(*The Increase in Colostrum Secretion on Early Skin-to-Skin Contact on Postpartum Mother*)

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ABSTRAK

Pendahuluan. Kolostrum terdiri dari banyak faktor pertahanan pasif dan aktif terhadap berbagai jenis pathogen. Produksi dari kolostrum dapat dirangsang oleh kontak kulit ke kulit yang lebih awal antara ibu dan bayi. Karena itu, tujuan dari penelitian ini menyelidiki dampak dari kontak kulit ke kulit yang lebih awal terhadap sekresi kolostrum pada ibu post partum. **Metode.** Penelitian ini adalah penelitian *cross sectional.* Data dianalisis menggunakan uji Mann–Whitney. Kriteria inklusi pada penelitian ini adalah ibu post partum terpelajar, kelahiran dalam >37 minggu kehamilan dengan cairan amnion jernih, berat badan bayi >2500 gr, skor Apgar 6-8, dan tidak ada kelainan kongenital. Sekresi dari kolostrum dipastikan dengan observasi. Dalam penelitian ini didapat 26 sampel. **Hasil.** Sekresi kolostrum lebih cepat keluar pada ibu dengan kontak kulit ke kulit yang lebih awal (p=0.002). **Diskusi.** Penelitian ini menunjukkan bahwa kontak kulit ke kulit yang lebih awal dapat mempercepat pengeluaran dari kolostrum

Kata Kunci: kontak *early skin-to-skin*, kolostrum, post partum.

ABSTRACT

Introduction. *Colostrum contains a large number of protective factors providing passive and active protection to a wide variety of known pathogens. Its production could be stimulated by early skin-to-skin contact between mother and baby. Hence, this study aimed to investigate the effect of early skin-to-skin contact on the onset of colostrum secretion in postpartum mother.* ***Methods.*** *This study was cross sectional. The data were analyzed by Mann–Whitney test. Literate postpartum mothers, underwent pervaginam delivery in >37 weeks of gestational age with clear amniotic fluid, having baby with > 2500 gr of weight, Apgar score 6 – 8, and no congenital defects were included in this study. The onset of colostrum secretion was measured through observation sheet. 26 samples were recruited in this study.* ***Results.*** *The onset of colostrum secretion was faster in mother underwent early skin-to-skin contact (p=0.002).* ***Discussion.*** *Thus, this study suggested that early skin-to-skin contact enhanced the onset of colostrum secretion.*

Keywords: *Early skin-to-skin contact, Colostrum, Postpartum*

INTRODUCTION

Colostrum is the first breast milk containing tissue debris and residual material from alveoli and mammary gland during puerperium. It contains also great amount of antibodies that act as a natural vaccine for the infant against a host of immunological threats. Colostrum secretion is enhanced through baby's suckling during breastfeeding process.

Early skin-to-skin contact is a direct skin–to–skin contact between mother and baby for at least one hour after delivery. This attempt is very beneficial in providing optimal quality and quantity of colostrum for baby. Furthermore, it improves baby to mother bonding.

Indonesian demographic survey in 2002–2003 revealed that only 4% baby obtained breast milk in the first hour after delivery. Moreover, Biasa, et al (2005) suggested that the average time of breast milk secretion onset was different between mother who did and did not perform initial breastfeeding in the 30 min after delivery. Thus, this study aimed to investigate the effect of early skin-to-skin contact on the onset of colostrum secretion in post-partum mother. This study revealed that early skin-to-skin contact enhanced colostrum secretion.

METHODS

A cross sectional study was conducted in Cempaka Ward, Ngudi Waluyo, Wlingi

General Hospital during May–June 2012. Literate postpartum mothers, underwent pervaginam delivery in >37 weeks of gestational age with clear amniotic fluid, having baby with >2500 gr of weight, Apgar score 6 – 8, and no congenital defects were included in this study.

The onset of colostrum secretion was measured through observation sheet. Conversely, post-partum mothers who reluctant to give early breastfeeding, consume drugs or herbs that stimulate breast milk production, had breast milk secretion onset before delivery procedure, had unhealthy baby who need certain medical treatment and mother with delivery complications were excluded from this study.

Correlation between early skin-to-skin contact and the onset of colostrum secretion was analyzed by Mann–Whitney test. The result was considered as significant when achieving p value <0.05.

RESULTS

Based on the result of the Mann-Whitney test obtained the value of sig= 0.002 meaning the influential early skin-to-skin contact significantly to the onset of colostrum secretion. It can be interpreted that onset of colostrum secretion on samples carried out early skin-to-skin contact faster than on a sample that is not done early skin-to-skin contact. Thus, this study suggested that early skin-to-skin contact enhanced the onset of colostrum secretion.

Table 1. Baseline Characteristic of Postpartum Mother

Variable	Early skin-to-skin contact	Non-Early skin-to-skin contact
Age, years	**(39.69±1.316 SD)**	**(27± 4.359 SD)**
Occupation; n (%)		
Housewife	8 (62)	7 (54)
Employee of government	1 (8)	2 (15)
Farmer	2 (15)	1 (8)
Private sector employees	2 (15)	3 (23)
Education; n (%)		
Elementary school	1 (8)	1 (8)
Junior High school	6 (46)	4 (31)
Senior High school	5 (38)	5 (38)
University	1 (8)	3 (23)
Parity; n (%)		
Primipara	7 (54)	10 (77)
Multipara	6 (46)	3 (23)
Delivery Method:		
Pervaginam	13 (100)	4 (31)
Caesarian	0	9 (69)
Duration skin–to–skin contact:		
< 60 min	4 (31)	-
≥ 60 min	9 (69)	-
Onset of colostrum secretion:		
≤ 24 hour	12 (92)	4 (31)
>24 hour	1 (8)	9 (69)

Table 2. Mean the Onset of Colostrum Secretion

	Mean the Onset of Colostrum Secretion	The Fastest Duration of Colostrum Secretion	The Longest Duration of Colostrum Secretion
Early skin-to-skin contact	531,54 min	60 min	1500 min
Non-Early skin-to-skin contact	2507,38 min	60 min	4560 min

DISCUSSION

Mother with baby done early initiation of breast feeding has time onset of secretion colostrum shortest is 60 minutes, longest time is 1500 minutes, with an average time secretion of colostrum 531,54 minutes. The secretion of colostrum occurs due to skin to skin contact between mother and newborn, the newborn's hand squeezing surrounding the nipple, surge the newborn's head to the breast, the newborn's behavior turned to the left and right, so the mother breast swipe cause secretion of breast milk be faster (Dinkes, 2008).

When the colostrum was secretion faster, the newborn immediately get nutrition from the mother. Early initiation of breastfeeding has benefits for improving the newborn's immune system because colostrum contains many immune factor IgG and IgA. Colostrum also contributed to preventing a jaundice becouse colostrum can serve as a laxative that can solve of bilirubin. In addition, Colostrum plays in the intestinal wall maturation and reduces the risk of allergies (Novianti, R. 2009).

The mean onset of secretion colostrum for multipara has faster than nulipara. The success of lactation is influenced by parity, and other factors such as the type, length, and medications used during labor. The mothers with normal vaginal birth have a means onset colostrum faster than sectio cesaria (SC). According to Journal of Pediatric, the process of giving birth in SC will inhibit the formation of breast milk production (Dawey, 2003). The mother with SC always difficult to breastfeed her baby immediately, especially if the mother is given a general anaesthetic. The mother was not responsive to breast feed her baby in the first hour after the baby is born. Although mother got an epidural anesthesia, the abdominal surgery relatively make the process of breast feeding was disturbing. The baby may be sleepy and not responsive to suckle, especially if the mother get pain medicine before surgery (Novianti, R. 2009). Nevertheless, breast feeding as frequently as possible after SC parturition will minimize these problems, and mother can produce adequat breast milk (Marasco, L, 2005).

CONCLUSION AND RECOMMENDATION

Conclusion

Early skin-to-skin contact is a direct skin–to–skin contact between mother and baby for at least one hour after delivery is very beneficial in providing optimal quality and quantity of colostrum secretion.

Recommendation

Early skin-to-skin contact not only performed in pervaginam delivery but also in cesarean delivery if the baby is healthy.

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