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POLITEKNIK KESEHATAN KEMENKES PALANGKA RAYA: HEALTH FORUM AND INTERNATIONAL SEMINAR
THE NEW NORMAL : Creating a Pleasant Virtual Communication

Breast massage to support the success of exclusive breastfeeding among postpartum mothers in Pekanbaru, Indonesia

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DOI: 10.35898/ghmj-51597

Selection and peer-review under responsibility of the scientific committee and the editorial board of the Annual Health Forum and International Seminar of the Politeknik Kesehatan Kemenkes Palangka Raya

A lack of exclusive breastfeeding will increase the possibility of mother's and infant's death. High health costs, an increasing incidence of diarrhea, and other infections may also cause mortality. The global breastfeeding initiation rate was relatively high, yet only 40% of infants under 6 months are breastfed and only 45% breastfed for up to 24 months. In 2025, the World Health Assembly (WHA) aims to achieve a minimum of 50% of exclusive breastfeeding for infants under 6 months (Kemenkes RI, 2018).

Figure 1 Exclusive Breastfeeding

An interview was conducted in a maternity clinic in Pekanbaru and it was found that only 2 out of 10 mothers gave breast milk without infant formula in the first three days of delivery. The rest of the postpartum mothers claim to experience breastfeeding smoothness issues in the first week of delivery. This worries the mother if her baby cannot get enough breast milk so that infant formula is given. The smoothness issue of breastfeeding in the first three days of delivery is a merely physiological problem but becomes the main cause of the failure of exclusive breastfeeding.

WALIKOTA PEKANBARU
PROVINSI RIAU

PERATURAN WALIKOTA PEKANBARU
NOMOR 48 TAHUN 2015

TENTANG

AIR SUSU IBU EKSKLUSIF

DENGAN RAHMAT TUHAN YANG MAHA ESA

WALIKOTA PEKANBARU,

Menimbang a. bahwa setiap ibu berkewajiban memberikan Air Susu Ibu (ASI) kepada anaknya;
b. bahwa setiap anak berhak untuk tumbuh dan berkembang secara optimal baik fisik, mental spiritual maupun kecerdasan untuk mewujudkan kehidupan terbaik bagi anak;
c. bahwa dalam upaya peningkatan kesehatan bayi, pemberian ASI Eksklusif dapat memenuhi kebutuhan gizi bayi sampai berusia 6 (enam) bulan karena air susu ibu mempunyai kandungan zat gizi sempurna dan lengkap serta volumenya paling tepat untuk menyiapkan sumber daya manusia yang sehat, cerdas, dan berkualitas;
d. bahwa berdasarkan Pasal 128 Undang-Undang Nomor 36 Tahun 2009 tentang kesehatan dinyatakan bahwa setiap bayi berhak mendapatkan Air Susu Ibu Eksklusif dan selama pemberian air susu ibu, pihak keluarga, Pemerintah, Pemerintah Daerah dan masyarakat harus mendukung ibu bayi secara penuh dengan penyediaan waktu dan fasilitas khusus;

PRESIDEN
REPUBLIK INDONESIA

PERATURAN PEMERINTAH REPUBLIK INDONESIA

NOMOR 33 TAHUN 2012

TENTANG

PEMBERIAN AIR SUSU IBU EKSKLUSIF

DENGAN RAHMAT TUHAN YANG MAHA ESA

PRESIDEN REPUBLIK INDONESIA,

Menimbang : bahwa untuk melaksanakan ketentuan Pasal 129 ayat (2) Undang-Undang Nomor 36 Tahun 2009 tentang Kesehatan, perlu menetapkan Peraturan Pemerintah tentang Pemberian Air Susu Ibu Eksklusif;

Mengingat : 1. Pasal 5 ayat (2) Undang-Undang Dasar Negara Republik Indonesia Tahun 1945;

2. Undang-Undang Nomor 36 Tahun 2009 tentang Kesehatan (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 144, Tambahan Lembaran Negara Republik Indonesia Nomor 5063);

Figure 2 Central and Local Government Support in Exclusive Breastfeeding

The support of the Indonesian government in providing exclusive breastfeeding is shown by issuing the Government Regulation No.33 of 2012 regarding Exclusive Breastfeeding, specifically in Chapter III Article 6 stating that every mother who gives birth must provide exclusive breastfeeding to her baby. The same obligation is also stated in the Constitution No.36 of 2009 concerning Health, Article 200 stating that anyone who deliberately hinders the program to provide exclusive breastfeeding as referred in Article 128 paragraph (2) is imprisoned for a maximum of 1 year and a maximum fine of Rp 100,000,000 (one hundred million rupiahs). In Pekanbaru, the Mayor is also very supportive towards the program and issues the Mayor Regulation No.48 of 2015 regarding exclusive breastfeeding, in which in Chapter VIII Article 10 states that local government affords assistance and supervision of exclusive breastfeeding and infant formula. In Article 11, it is emphasized that any health officer violating the provisions of Article 10 is subject to administrative sanctions.

The attempt to increase breast milk production in mothers after childbirth can be carried out using pharmacological and non-pharmacological methods. Pharmacological methods are done by giving therapy such as metoclopramide, chlorpromazine, and domperidone. Though, the effectiveness of these medicines in intensifying the production of breast milk is inseparable from some side effects such as headache, dry mouth, frequent thirst, diarrhea, stomach cramps, and redness of skin (William & Carrey, 2016). Further, non-pharmacological methods are usually completed in a natural way such as *breast care*, warm compress, back massage, *woolwich,* and *endorphins* massage (Bahiyatun, 2008; Rini & Kumala, 2017; Pamuji, 2014).

Figure 3 Woolwich Massage in Postpartum Mothers to Increase Breast Milk Production

Woolwich massage is performed on the lactiferous sinus area, precisely 1-1.5 cm above the breast areola, to remove the milk that is in the lactiferous sinuses. This massage can stimulate nerve cells in the breast, the stimulation is transmitted to the hypothalamus and the anterior pituitary responds to release the hormone prolactin which will be circulated by the blood to the myoepithelial cells of the breast to produce milk, increase milk volume, and prevent damages in the breast that can cause breast swollen (Pamuji, 2014). Endorphine massage is a gentle touch massage technique that can normalize heart rate and blood pressure, as well as improve a relaxed state in the mother's body by triggering a feeling of comfort on the surface of the skin.

The *woolwich* and *endorphins* massage method could influence the production of prolactin hormone and oxytocin as well as give relaxation which can fulfill the need of postpartum mothers in overcoming breastfeeding problems in the first days after childbirth. This is proven by Barokah and Utami (2017) who gave *woolwich* massage intervention in postpartum mothers in the first to third days whose result influenced the production of breast milk. Hartono (2016) in his study also reveals that *endorphins* massage increases the breast milk volume.

Figure 4 Endorphins Massage on Postpartum Mothers to Increase Breast Milk Production

A study was conducted on 20 postpartum mothers in which 10 of them were given *woolwich* massage intervention and the other 10 were given an intervention of *endorphins* massage on breast milk production. The study results show that the average breast milk production of mothers who were given *endorphins* massage (125.30 mL) was much more than those given *woolwich* massage (99.80 mL). There was a significant difference in breast milk volume between those given *endorphins* and *woolwich* massage by 25.50 mL.

It is proven that the production of breast milk can be increased by giving *endorphins* massage; that is a massage technique done on the neck, arms, and hands of postpartum mothers. Hidayati & Hanifah (2019) affirm that when the *endorphins* massage is done, the spinal nerve is stimulated to release *endorphins* in the body which then stimulates oxytocin. For the breast nerve consists of many dorsal nerves coordinated along the spine, while being massaged, the spinal nerve will send signals to the brain to release oxytocin resulting in a contraction of myoepithelial cell that encourages the release of breast milk.

Figure 5 Abundant Breast Milk Production After The Endorphins Massage is Completed

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Cite this article as:

Susilawati E, Hindratni F & Rahmadani C. Breast massage to support the success of exclusive breastfeeding among postpartum mother in Pekanbaru, Indonesia. GHMJ (Global Health Management Journal). 2022; 5(1): 36-39. doi:10.35898/ghmj-51597