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Original Research Article

EFFORTS TO INCREASE BREAST MILK PRODUCTION: LITERATURE REVIEW

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ABSTRACT

Introduction. Breast milk is the ideal nutrition for babies and the most perfect main food for babies. Breast milk has a composition of nutrients that are in accordance with the baby's needs to grow and develop optimally. However, Problems of mothers in breastfeeding are still often found due to various factors, one of which is not smooth milk production. The purpose of this study was to find out what efforts can be made to increase breast milk production. **Method.**This study used the literature review. **Results&Analysis.**Efforts to increase breast milk production were: sources of natural ingredients, massage, giving positive affirmations. **Discussion.**Breast milk production is strongly influenced by physiological and psychological factors, so it is necessary to combine various efforts.

Keywords: Breast Milk Production, Effort, Enhancement, Smoothness.

INTRODUCTION

Breast milk is the ideal nutrition for babies and the most perfect main food for babies. Breast milk has a composition of nutrients that are in accordance with the baby's needs to grow and develop optimally (Pollard, 2016). Optimal breastfeeding is from birth to 23 months of age to minimize infant/toddler mortality (WHO, 2020).

According to WHO (2020) there is an increase in exclusive breastfeeding globally, which is around 44% of infants aged 0-6 months worldwide during the 2015-2020 period from 50% of the target for exclusive breastfeeding. Meanwhile in Indonesia, the achievement of exclusive breastfeeding in 2020 is 66.1%. This has exceeded the target of the 2020 strategic plan, which is 40%. Exclusive breastfeeding in East Java Province in 2020 has reached the target of 80.0%. Situbondo area, the achievement of exclusive breastfeeding in 2020 is 74.2% with a description of 758 babies out of 1022 examined. This has exceeded 50% of the target set by the Province.

The achievement of exclusive breastfeeding can be caused by various factors, including sociodemographic factors (age, occupation, social education, economy, place of residence),

psychosocial factors (husband support, family support, beliefs, desires, perceptions), and pre/post natal factors (parity, type of delivery, complications, counseling) (Lumbantoruan, 2018:15).The older the mother's age and the more work the mother does, the frequency of failure of exclusive breastfeeding can increase.The lack of exclusive breastfeeding will increase the infant mortality rate, because the baby's nutritional needs for breast milk are not fulfilled. According to data from Riskesdas (2018), that the reason for insufficient breast milk for children is because breast milk does not come out (65.7%),In addition, the condition of the mother's nipples is not supported, the baby's difficulty in sucking which causes reduced stimulation of the hormones prolactin and oxytocin.(Lestari, 2018).

Early Initiation of Breastfeeding or IMD is one of the efforts that have been made to increase breast milk production. The important process that occurs is that the baby will start sucking the mother's nipple, aiming to stimulate the mother's milk to produce immediately and can come out (Trisnawati, 2017). However, the problems of mothers in breastfeeding are not only found at the beginning of the breastfeeding period, but during breastfeeding are often also found due to various factors, thus increasing the failure rate in exclusive breastfeeding. (Norlina, 2019).

Based on this description, to avoid an increase in the infant mortality rate (IMR) due to the lack of coverage of exclusive breastfeeding, it is necessary to make efforts to help mothers overcome problems when breastfeeding. Therefore, it is necessary to make an effort to increase and maintain breast milk production through literature study.

RESEARCH METHODS

This literature review uses five processes, namely (1) identifying research questions, (2) identifying relevant studies, (3) conducting article selection, (4) mapping data (5) compiling, summarizing and presenting the results. (O'malley dan Arksey, 2005). The framework used in this research is PEOS. This framework aims to identify research questions in search engines, namely pubmed and gray literature. found as many as 1115 articles and obtained 10 relevant articles. The PEOS framework is shown in table 2.1. Articles that are declared relevant are then carried out with data extraction and mapping of the results.

RESULTS

The results of the review are then compiled based on mapping the data into several themes, namely:

a. Food sources; several efforts have been made by utilizing natural ingredients that can be consumed to increase breast milk production. These natural sources, including the results of this review, include:; peanut extract, black cumin, katuk leaves, papaya fruit, long bean leaves, banana heart, and Moringa leaves,
b. acupressure; Several attempts have been made to use certain techniques to stimulate hormones that can directly affect the increase in breast milk production. The results of the review found various techniques including Endorphin Suggestive Oxytocin Massage Stimulation, Oxytocin massage, Acupressure.
c. Giving positive affirmations with Hypnobreastfeeding and Self-Selected Individual Music.

Tabel 2.1 Framework

Elemen	Inclusion
Population	Breastfeeding mothers
Exposure	Effort, Cause, Influence Factor
Outcome	Breast milk production
Study Design	Qualitative, Quasi-Experimental, Pre-Experimental,

DISCUSSION

A. Source of natural ingredients

1. Black cumin

The results of research conducted by Siregar and Yanti (2021) showed that there was an effect of boiled black cumin combined with honey on increasing breast milk production. The same thing was also done by Ritonga (2017) and in his research it was explained that there was an increase in breast milk production after giving black cumin and honey stew.

Black cumin is a type of plant that contains lagagogum. Lagtagogum has the potential to stimulate the hormones oxytocin and prolactin such as alkaloids, polyphenols, steroids, flavonoids and other substances that are effective in increasing and launching breast milk production. (Ritonga, 2017).

2. Moringa Leaves

Based on the results of research by Atok and Tumeluk (2021), Indriani and Meilani (2021) in different places but got the same results, namely showing the effect of consumption of Moringa leaf extract on increasing breast milk production.Likewise, the research of Safaringga and Putri (2021), explained that the average increase in breast milk production from the intervention group was 36,667 while the control group had an average increase in milk production of 11.333. The results of the bivariate test are known to have a significant effect. The results of this study are in line with the research conducted by Yuni Sulistiawati (2017) which explains that there is a difference in the average prolactin level in the intervention group (231.72 ng/ml), and

the control group (152.75 ng/ml) and the effect significant increase in prolactin levels (p = 0.002).

Moringa leaves are effective Galactagogues to increase volume and facilitate the flow of breast milk (Asih, 2016). Moringa leaves contain phytosterol compounds, namely, alkaloids, saponins and flavonoids which function to increase and facilitate breast milk production (Mutiara, 2016).

3. Jantung pisang

In addition to Moringa leaves and black cumin, banana blossoms have also been shown to increase breast milk production. This is indicated by the results of research by Noviawanti et al (2019) by giving 200 grams of banana heart for 3 consecutive days that there is a significant difference in breast milk production before and after consumption of banana heart. This has also been done by previous researchers with the same result, namely the provision of banana blossoms can affect the increase in breast milk production (Rilyani, 2019; Hubaya et.al, 2015; wahyuni et.al, 2012).

Jantung pisang It contains extraordinary nutritional value, namely fiber and protein. The major amino acids most commonly found are glycine, leucine, alanine and aspartamic acid. In addition, phytochemical compounds such as saponins and flavonoids and vitamin E (Wardhani, 2014). According to Tjahjani (2014) banana heart contains laktagogum which has the potential to stimulate the hormones oxytocin and prolactin. Hormones needed in the production and facilitate the release of breast milk.

4. Papaya fruit

Papaya fruit is also believed to be able to increase milk production. The research of Pattipeilohy and Enoch (2019) proves that there is a significant effect of breast milk production before and after being given papaya fruit stew. This study is in line with Wilda and Sarlis (2021) that giving young papaya has an effectiveness in increasing breast milk production.

Papaya contains enzymes that have the effect of increasing the number and diameter of the mammary glands, vitamins C, A, B and E, and minerals. The chemical content of young papaya fruit contains polyphenols, and steroids. Polyphenols and steroids function to increase the work of the hormone prolactin which stimulates the alveoli to form breast milk. Polyphenols and steroids also affect the work of the oxytocin hormone to circulate breast milk, so that breast milk flows more profusely in mothers who consume papaya fruit than mothers who do not consume it (Istiqomah, dkk, 2014). The content of vitamin A is 0.7065 in 1 gram of green papaya. Vitamin A is an important

micronutrient for postpartum mothers.

Vitamin A helps the anterior pituitary to stimulate the secretion of the hormone prolactin in the brain epithelium and activates epithelial cells in the alveoli to accommodate milk in the breast. (Chahyanto, A, B. Roosita, 2013).

5. Katuk Leaves

Dolang research (2021) showed that before giving katuk leaf decoction, the average milk production was 20.27 ml and after giving katuk leaf decoction the average milk production was 61.33 ml, the p value was 0.000 (p < 0 ,05). The same study was also conducted by Aminah and Purwaningsih (2013) that giving 100 g of katuk leaf decoction with 300 cc of water given for 7 days can increase breast milk production up to 93.8%. This shows that katuk leaves have an effect on increasing breast milk production.Katuk leaf is one of the sources of food that is rich in protein, besides that it contains saponins and alkaloids. The content of alkaloids and sterols contained in katuk leaves can increase glucose metabolism for lactose synthesis so that milk production increases (Santoso, 2013).

B. Massage

The massages referred to in this review include giving oxytocin massage, acupressure and endorphin massage. Oxytocin massage and acupressure have been shown to affect the increase in breast milk production as research conducted by Khabibah and Mukhoirotin (2019) that there are significant differences in acupressure therapy, oxytocin massage compared to the control group. This is in line with the results of research by Rahayu and Yunarsih (2018), Maita (2016) and Doko (2019) which explain that oxytocin massage can significantly affect breast milk production.

Oxytocin massage is an effort made by giving massage to the spine that ends at the fifth – sixth costae bone to stimulate the hormones prolactin and oxytocin (Yohmi dan Roesi, 2009 dalam (Rahayu, 2015). While acupressure is done by massaging at the points SI1 (Shaoze) CV17 (shanzhong), ST 18 (Rugen) and LI4 (Hegu) to treat deficiency in breast milk production. (Rajin, Masruroh dan Ghofar, 2015).

Acupressure stimulation is transmitted via nerve axons to the spine and brain. This causes the activity of the central nervous system which results in changes in neurotransmitters, hormones (oxytocin and prolactin), the immune system, biomedical effects, endorphins and others, resulting in normalization of modulation and balance effects on Qi

(Rahmaika, dkk, 2018). Both of these methods have the same technique and function but are carried out in different places.

C. Giving positive affirmations

Giving positive affirmations can be done through hypnobreastfeeding and providing murottal therapy. Both of these ways are believed to help increase milk production. As the results of research conducted by Vidiayati, January and Wijiastutik (2021) prove that the provision of hypnotherapy and music therapy (Self selected Individual Music) increases the average production of expressed breast milk in nursing mothers who work. Hypnobreasfeeding strives to make the breastfeeding process comfortable, relaxed, body and soul in a calm condition accompanied by positive affirmations that will guide, convince yourself that you are able to give breast milk, the milk will flow profusely.A relaxed, comfortable atmosphere can also be done by listening to music or aromatherapy, relaxing muscles and breathing (Armini, 2016). The breastfeeding process requires a relaxed, comfortable and calm condition to avoid disturbances in the endocrine system, blood flow, nervous system and other systems in the body to function better.

CONCLUSION

Breast milk production is influenced by physiological and psychological factors, so that efforts can be made to increase milk production. Efforts that must be made include improving maternal nutritional intake and providing interventions through massage to stimulate the hormones needed in breast milk production. In addition, it is the provision of positive affirmations to change the psychological condition of the mother to become more relaxed, calm and comfortable so that the blood flow, nervous system and other systems become smooth and breast milk production is abundant..

It is hoped that some of the efforts that have been conveyed previously can be carried out by combining them as a whole, because these efforts have covered the needs of the mother during the breastfeeding process.

REFERENCES

Armini, Ni Wayan. (2016). Hypnobreasfeeding awali suksesnya ASI Eksklusif. Jurnal Skala Husada. Vol.13. (1). 21-19.

Anggraini, Dinda M, Putri, Dewi R dan Susilawati. 2021. Komsumsi Buah Pepaya pada Ibu Menyusui Mempengaruhi Berat badan bayi Usia 24-40 hari pada Ibu Menyusui Eksklusif. Midwifery Journal. Vol.1(4);245-252

Asih, Y. (2016). Asuhan Kebidanan Nifas dan Menyusui. Jakarta: CV. *Trans Info Media*.

Asokawati, Dwi F, Kristiarini, J & Sari F. 2020. Efektifitas Pemberian Ekstrak daun katuk terhadap Produksi ASI dan Peningkatan Berat Badan Bayi di Praktik Mandiri Bidan Wilayah Kabupaten Madiun. Jurnal Guna Bangsa. Vol. 8(2)

Atok, Yosefa S & Tumelauk, Meri F. 2021Hubungan Konsumsi Daun Kelor dengan Produksi ASI Eksklusifpada Ibu Menyusui Suku Timor Kelurahan Manutapen. Jurnal Kampus STIKES YPIB Majalengka. Vol. 9(1).21-29

Batubara, Novita S & Siregar, Rya Anantasya. 2021. Pengaruh Pemberian Sari Kacang Tanah Terhadap Peningkatan Produksi ASI pada Ibu Menyusui di Desa Padang Baruas Kabupaten Padang Lawas Utara. Jurnal Kesehatan Ilmiyah Indonesia. Vo. 6(1)

Djama, Nuzliati T. 2018. Pengaruh Komsumsi Daun Kacang Panjang terhadap Peningkatan Produksi ASI pada Ibu menyusui. Jurnal Riset Kesehatan. Vol. 14(1).5-10

Doko, Mariana T, Aristiati Kun dan Hadiasputro S. 2019. Pengaruh Pijat Oksitosin oleh Suami Terhadap Peningkatan Produksi ASI pada Ibu nifas. Jurnal Keperawatan Silampari. Vol. 2(2). DOI:https://doi.org/10.31539/jks.v2i2.529

Dolang, Mariene W, dkk. 2021. Pengaruh Pemberian Rebusan Daun Katuk Terhadap Produksi ASI pada Ibu nifas. JUMANTIK. Vol. 6(3). DOI: 10.30829/jumantik.v6i3.9570

L. O'malley and H. Arksey, "Scoping Studies: Towards a Methodological Framework," *Int. J. Soc. Res. Methodol.*, vol. 8 (1), pp. 19–32, 2005.

Hubaya, Karimah dan Sulima. (2015). Pengaruh Konsumsi Jantung Pisang Kepok terhadap Peningkatan Produksi ASI pada ibu Menyusui diWilayah Kerja Puskesmas Gambesi Kota Ternate. Jurnal Kesehatan. Vo. 8 (1)

Indriyani, Yuyun W & Meilani, Elvia. 2021. Pengaruh Minuman Daun Kelor terhadap Peningkatan Produksi Air Susu Ibu (ASI) pada Ibu Postpartum di Wilayah Kerja UPTD Puskesmas Kertajati Kabupaten Majalengka. E-Journal STIKES YPIB Majalengka. Vol. 9(1). 68-79

Khabibah, Lailatul & Mukhoirotin. 2019. Pengaruh Terapi Akupresur dan Pijat Oksitosin Terhadap Peningkatan Produksi ASI pada Ibu postpratum di Jombang. Jurnal Edunursing. Vol. 3(2)ayi ≤3 bulan di PMB Risma Deli Seradang. GEMAKES Jurnal Pengabdian Masyarakat. Vo. 1(2). DOI: 10.36082/gemakes.v1i2.301

Lubis, Rismahara & Siregar Yusniar. 2021. Pelaksanaan Kegiatan Hypnobreasfeeding pada Ibu menyusui yang Mempunyai

Maita, Liva. 2016. Pengaruh Pijat Oksitosin Terhadap Produksi ASI. Jurnal Penelitian Kesehatan Suara Forikes. Vo. 7(3)

Mutiara. (2016). Pemberian ASI eksklusif dan faktor-faktor yang mempengaruhinya. Yogyakarta: Nuha Medika.

Noviawanti. Dkk (2019). Jantung Pisang terhadap Peningkatan Produksi ASI di Desa Sungai Putih. Jurnal Ilmu Kebidanan. Vol. 8 (2)

Pattypeilohy, Aning & Henukh, Dina Melanika. 2019. Pengaruh Pemberian Air Rebusan Buah

Pepaya dalam Peningkatan Produksi ASI Ibu Nifas DI puskesmas Manutapen. CHMK Midwifery Scientific Journal. Vol. 2(2)

Rahmaika Arumsari, D., Wayan Agung

Indrawan, I. and Sri Wahyuni, E. (2018) 'The Combination of Acupressure and Affirmation Relaxation as an Alternative Method to Increase Breast Milk Production and Breastfeeding Self-efficacy', *ResearchJournal of Life Science*, 5(1), pp. 66–76. doi: 10.21776/ub.rjls.2018.005.01.7.

Rajin, M., Masruroh and Ghofar, A. (2015)

Panduan Babon Akupunktur. Yogyakarta:

IndoLiterasi

Rahayu, Dwi dan Yuniarsih. (2018). Penerapan Pijat Oksitosin dalam Peningkatan Produksi ASI ibu Postpartum. Jurnal Ners Community. Vol. 9(1). 8-14

Rilyani dan Wulandasari, Renda. (2019). Konsumsi Sayur Jantung Pisang terdahap Peningkatan Produksi ASI pada Ibu masa Nifas. Holistik Jurnal Kesehatan. Vol. 13 (4)

Santoso, U. (2013). *Katuk Tumbuhan Multi Khasiat*. Bengkulu: Fakultas Pertanian (BPFP) UNIB.

Safaringga , A & Putri, Ratna D. 2021. Pengaruh Pemberian Ekstrak Daun Katuk terhadap Produksi ASI pada Ibu Nifas. Journal Of Topical Medicine. Vol.1(1);9-15

Safitri, Ragilia E, dkk. 2021. Pemberian Ekstrak Daun Katuk dapat Meningkatkan Produksi ASI pada Ibu Menyusui. Jurnal Kebidanan Mahalayati. Vol. 7(4);751-756

Siregar, G.F.G. Yanti, Mutiara Dwi. 2021. Pengaruh Rebusan Jintan Hitam dan Madu terhadap Peningkatan Produksi ASI pada Ibu Menyusui di Desa Sidomulyo Kabupaten DeliSerdang. Jurnal Dopple 7 . 5(2).182-188

Tjahjani, E. (2014). Pengaruh Konsumsi Jantung Pisang Terhadap Kelancaran ASI pada Ibu Nifas. *Grya Husada*, (110), 41–46.

Vidayati. Lelly A, Januarti % Wijiastutik. 2021. Studi Komparasi Terapi Hypnobreasfeeding dan Self-Selected Individual Music Therapi. Terhadap Produksi ASI pada Ibu Menyusui yang Bekerja. Jurnal Ilmiah Obsgin. Vo. 13(1)

Wahyuni, Sumiati dan Nurliana. (2012). Pengaruh Konsumsi Jantung Pisang Batu Terhadap Peningkatan Produksi ASI di Wilayah Puskesmas Srikuncoro Kecamatan Pondok Kelapa Bengkulu Tengah. Buletin Penelitian Sistem Kesehatan. Vol. 15 (4). 418-424

Wardhany, K. H. (2014). *Khasiat ajaib pisang - khasiatnya A to Z, dari akar hingga kulit buahnya / Ketty Husnia Whardhany ; editor, Th. Arie Prabawati* (Edisi I; A. Prabawati, ed.). Yogyakarta: Rapha Publishing.

Wilda, Ifna & Sarlis, Nelfi. 2021. Efektifitas Pepaya Terhadap Kelancaran Produksi ASI pada Ibu Menyusui. Journal of Midwifery Science. Vol 5(2)