

The Effectiveness of Moringa Leaf *Simplicia* on the Adequacy of Breast Milk in Babies Less Than 6 Months Old In Terms Of the Baby's Weight at the Health Center

Ni Komang Sunarsih, Putu Mastiningsih, Pande Putu Novi Ekajayanti
STIKES Bina Usada Bali
sunarsihkomang@gmail.com

Abstract

Breast milk (breast milk) is the best food for babies. The benefits of breastfeeding can be felt by babies, mothers and families, but data shows that breastfeeding for toddlers in Indonesia is still very low. Factors that can influence mothers not to give breast milk to their babies include insufficient milk production. A sign of sufficient milk in infants is their weight gain of more than 10% in the first week. The baby's weight will increase by 200-2500 grams per week. The smoothness of breast milk production is influenced by many factors, namely the nutritional status of the mother, mother's nutrition can be met with alternative Moringa (*Moringa oleifera*) plants, because they contain phytosterol compounds which function to increase and facilitate milk production. In babies less than 6 months in terms of baby's weight in the Posyandu in the working area of the Tembuku I Health Center. This study uses the Quasi Experimental research method with the posttest only control design where in this research design there will be an experimental group and a control group. The sample in this study was 30 mothers breastfeeding babies less than 6 months, divided into 2 groups, namely 15 people in the experimental group and 15 people in the control group. Data were analyzed using Independent t-test. Results Analysis using statistical tests in this study was carried out using the independent-T Test test, the results obtained were that the p value was $0.025 < \alpha 0.05$. Thus the administration of Moringa leaf *simplicia* to breastfeeding mothers affects the baby's weight in the posyandu working area of the Tembuku I Health Center.

Keywords : Baby, Breast Milk, Moringa leaves, *Simplicia*

Introduction

Mother's milk (ASI) is the best natural nutrition for babies because it contains the energy and substances needed during the first 6 months of a baby's life. The growth and development of a baby is determined by the amount of breast milk obtained, including the energy and other substances contained in breast milk (Gultom, 2018). The United Nation Children's Fund (UNICEF) and the World Health Organization (WHO) recommend that children should only be breastfed with breast milk (ASI) for at least 6 months. Solid food should be given after the child is 6 months old, and breastfeeding should be continued until the child is 2 years old. In 2018, the Indonesian government changed the recommendation for the duration of exclusive breastfeeding from 4 months to 6 months (UNICEF, 2017).

The government's efforts to support mothers' movements to provide breast milk to

babies are by establishing several regulations. The regulations provided by the government regarding breastfeeding are contained in Law Number 36 of 2009 concerning Health which is stated in article 128 paragraphs 2 and 3, namely, that during breastfeeding, the family, local government and community must provide full support by providing time and facilities. specifically (Ministry of Health of the Republic of Indonesia, 2019).

Data in Indonesia shows that exclusive breastfeeding coverage is only 42%. This figure is still below the WHO target which requires breast milk coverage of up to 50%. This figure shows that few children in Indonesia get adequate nutrition from breast milk (Nursalam, 2016). Referring to the 2014 national program, the target of providing exclusive breastfeeding was 80%, then nationally the coverage of exclusive breastfeeding was 52.3%, which has not yet reached the target. According to the province,

only West Nusa Tenggara province achieved the target, namely around 84.7%. North Sumatra is one of the provinces with the lowest exclusive breastfeeding achievement, namely 37.6% (Nursalam, 2016).

Based on data from the Bali Province Health Profile in 2020, exclusive breastfeeding coverage was 76.7%. The regencies/cities with the lowest achievements were Denpasar City at (64.5%) and Tabanan Regency at (69.7%). Jembrana Regency was (74.8%), Badung Regency was (74.6%), Klungkung Regency was (71.1%). Districts/Cities namely Bangli Regency amounted to (89.3%), Gianyar Regency amounted to (80.3%), Buleleng Regency amounted to (79.0%), and Karangasem Regency amounted to (78.0%) (Nursalam, 2016)

Providing breast milk to babies immediately after birth can reduce infant mortality by up to 22%. This action can also help reduce the possibility of postpartum hemorrhage, which is one of the most common causes of maternal death. The benefits of breastfeeding can be felt by babies, mothers and families, however data shows that breastfeeding for toddlers in Indonesia is still very low. Factors that can influence mothers not to breastfeed their babies include insufficient breast milk production (Nursalam, 2016).

A baby is considered to be getting enough breast milk if there is significant weight gain, the baby feels satisfied and full after breastfeeding, then the baby can sleep soundly for 2-4 hours, and the baby can urinate or defecate at least six times a day (Nursalam, 2016) A sign of adequate breast milk in babies is that their body weight increases by more than 10% in the first week. The baby's weight will increase by 200-2500 grams per week (Nursalam, 2016)

The smooth production of breast milk is influenced by many factors, factors including the mother's nutritional status, mother's nutrition can be fulfilled with alternative extracts. The Moringa plant (*Moringa oleifera*) is a local food ingredient that has the potential to be developed in the culinary arts of nursing mothers, because it contains phytosterol compounds which function to increase and facilitate breast milk production (Nursalam, 2016). Moringa leaves contain 5.49 mg/100 g of Fe and phytosterols, namely sitosterol 1.15%/100 g and stigmasterol 1.52%/100g which stimulate breast milk production. Moringa leaves contain quite high

levels of protein and amino acids. This content stimulates an increase in the hormone prolactin, with an increase in the hormone prolactin making breast milk production abundant. The baby's needs can be met, especially in the breast milk produced which contains high levels of protein which can increase the baby's weight or help the baby grow optimally (Winarno, 2017).

Research conducted by Zakaria (2018) on the effect of giving Moringa leaf extract on the quantity and quality of breast milk stated that there was a change in breast milk production when mothers were given Moringa leaf extract. When a preliminary study was carried out, it turned out that in the Tebing Tinggi work area, 15 out of 20 postpartum mothers had problems when breastfeeding. Based on the study above, researchers are interested in conducting research in Tebing Tinggi, apart from the problem of substandard breast milk production, Moringa plants also grow in Tebing Tinggi.

Based on a preliminary study conducted by the author in August 2022 at Posyandu, it was found that the number of mothers breastfeeding babies less than 6 months old was 45 people. Researchers conducted interviews with 7 breastfeeding mothers, 5 breastfeeding mothers gave additional bottle milk because breast milk was not enough and 2 mothers gave exclusive breast milk. Based on the above, the author wants to conduct research on "The effectiveness of Moringa leaf *simplicia* on the adequacy of breast milk in babies less than 6 months old in terms of the baby's weight at the Posyandu in the Tembuku I Community Health Center working area?".

METHOD

This research uses a pre-experimental research method with a posttest only control group design. The population in this study was all 45 mothers breastfeeding babies less than 6 months old.

Sampling was carried out using purposive sampling. The sample in this study consisted of 30 mothers breastfeeding babies less than 6 months old, divided into 2 groups, namely 15 people in the treatment group and 15 people in the control group. The instrument used in this research was a child's scale.

The results of the analysis using statistical tests in this research were carried out using the independent t test.

RESULTS AND DISCUSSION

RESULTS

1. RESPONDENT CHARACTERISTICS: GENDER, AGE OF BABY, EDUCATION OF BREASTFEEDING MOTHER, AND OCCUPATION OF BREASTFEEDING MOTHER

Table 1. Frequency Distribution Respondent Characteristic

Variabel	Kelompok Perlakuan		Kelompok Kontrol	
	f	%	f	%
Jenis Kelamin				
Laki-Laki	6	40	5	33,3
Perempuan	9	60	10	66,7
Usia Bayi				
1 bulan	3	20,0	2	13,3
2 bulan	2	13,3	3	20,0
3 bulan	3	20,0	3	20,0
4 bulan	2	13,3	5	33,3
5 bulan	5	33,3	2	13,3
Pendidikan Ibu Menyusui				
SD	1	6,7	4	26,7
SMP	7	46,7	4	26,7
SMA	7	46,7	6	40,0
PT	0	0	1	6,7
Pekerjaan Ibu Menyusui				
Buruh	2	13,3	0	0
IRT	7	46,7	9	60,0
Swasta	3	20,0	1	6,7
Wiraswasta	3	20,0	5	33,3

Based on table 1, it shows that the majority gender in the treatment group was female with a percentage of 60.0%, while in the control group there were 10 respondents with a percentage of 66.7% female. The maximum age of babies in the treatment group of respondents was 5 months with a percentage of 33.3%, while the age of the most babies in the control group of respondents was 4 months with a percentage of 33.3%. The education of breastfeeding mothers in the treatment group was mostly middle school and high school, namely 7 respondents with a percentage of 46.7%, while the education in the control group of respondents was mostly high school, namely 6 respondents with a percentage of 33.3%. The occupation of breastfeeding mothers in the treatment group was mostly housewives, namely 7 respondents with a percentage of 46.7%, while the occupation of the control group of respondents was mostly housewives, namely 9 respondents with a percentage of 60.0%.

Average Baby Weight Gain in the Control Group

Table 2. Average Baby Weight Gain in the Control Group at Posyandu in the Community Health Center Working Area Tembuku I

Variabel	n	Mean±SD	Min-Maks	95%CI (Upper-Lower)
Kecukupan ASI (Berat Badan Bayi (Kg)) Setelah Perlakuan pada Kelompok Kontrol	15	5,00 ± 0,86	3,47 - 6,10	4,52 - 5,48

Based on table 5.3, it shows that the average weight of babies in the control group after treatment is known to be 5.00 kg with a minimum value of 3.47 kg and a maximum value of 6.10 kg. Apart from that, the standard deviation of the baby's weight value is 0.86 with a lower confidence limit value of 4.52 and an upper confidence value of 5.48 at the 95% confidence limit ($\alpha=0.05$).

1. Average Baby Weight Gain in the Treatment Group

Table 3. Average Baby Weight Gain in the Treatment Group at Posyandu in the Tembuku I Community Health Center Working Area

Variabel	n	Mean±SD	Min-Maks	95%CI (Upper-Lower)
Kecukupan ASI (Berat Badan Bayi (Kg)) Setelah Perlakuan pada Kelompok Perlakuan	15	5,49 ± 1,45	4,04 - 8,47	5,24 - 6,85

Based on table 3, it shows that the average weight of babies in the control group after treatment was found to be 5.49 kg with a minimum value of 4.04 kg and a maximum value of 8.47 kg. Apart from that, the standard deviation of the baby's weight value is 1.45 with a lower confidence limit value of 5.24 and an upper confidence value of 6.85 at the 95% confidence limit ($\alpha=0.05$).

4. Hypothesis test results using the independent t-test

Table 4. Analysis of the Adequacy of Breast Milk in terms of Infant Weight Gain in the Treatment Group and Control Group at Posyandu in the Working Area of Tembuku I

Community Health Center

Based on table 4, the results of the hypothesis test using the independent t test showed a value of $p = 0.025 < \alpha (0.05)$, which means that there is an effect of Moringa leaf

Variabel	t	Mean different	95% Confidence Interval of the Difference	P (Sig. 2-tailed)
Kecukupan ASI (Berat Badan Bayi (Kg)) Setelah Perlakuan pada Kelompok Kontrol dan kelompok Perlakuan	-2.404	-1.04733	-1.94944 0.025	0,025

simplicia on the adequacy of breast milk in babies less than 6 months old in terms of the baby's weight in the posyandu in the working area of the health center. Tembuku I.

DISCUSSION

1. Respondent Characteristics (Gender, Age of Baby, Education of Breastfeeding Mother, and Occupation of Breastfeeding Mother)

a. Baby Gender

According to Fatmawati (2018), differences in the gender of the baby do not determine the number of times the baby breastfeeds, but are determined according to the baby's needs. If the baby is active, it will need a lot of calories so the baby will eat more when breastfeeding. The weight growth of male and female babies is different. The growth period for boys is greater than for girls. According to Sacharin (2012), female babies born at term are around 14 grams lighter than boys born at term. This is in line with Santoso's (2013) research showing that boys tend to have better growth and development than girls because of the influence of mother and family behavior in caring for children, especially in giving priority to nutritious food and health.

b. Baby Age

The characteristics of respondents based on age in the experimental group showed that the most respondents were 5 months old, 5 respondents with a percentage of 33.3%. Meanwhile, in the control group, the most respondents were 4 months old, 5 respondents with a percentage of 33.3%. This research is in line with the theory that explains the increase in baby's weight according to age in the first year of life, if the baby gets good nutrition, it is in the first

trimester (700-1000 grams/month), second trimester (500-600 grams/month), third trimester (350- 450 grams/month) fourth quarter (250-350 grams/month) (Soetjiningsih, 2012). According to researchers, the increase in baby weight is influenced by age. The increasing age of a baby can have an effect on the increase in food intake it consumes and the physical changes it experiences.

Breastfeeding Mom Education

The characteristics of respondents based on education in the experimental group showed that the majority of respondents' education was middle school and high school, 7 respondents with a percentage of 46.7%, while in the control group, the highest education was 6 respondents, high school, with a percentage of 33.3%. According to Bunga (2022) education is guidance given by someone to others regarding something so that they can understand. It cannot be denied that the higher a person's education, the easier it is for that person to receive information. On the other hand, if a person's education is low, it will hinder the development of a person's attitude towards receiving information or new things introduced. The mother's level of education greatly influences the mindset and information received by the mother. In this study, the education of the respondents, most of whom were upper middle school, meant that access to the information they received was also limited. So it can be concluded that the higher the level of education, the easier it will be to receive information.

c. Breastfeeding Mom Work

Characteristics of respondents based on occupation in the experimental group showed that the occupation of the respondents was mostly housewives, 7 respondents with a percentage of 46.7%, while the occupation in the control group was mostly housewives, 9 respondents with a percentage of 60.0%.

According to Marmi (2019), working mothers affect the quality of

breastfeeding. Mothers who don't work have more free time to give exclusive breast milk to their babies and mothers who work less have time to breastfeed and get their babies used to bottle-feeding when they leave work.

This research is in line with research conducted by Astuti, et al, (2019) which states that working mothers do not have free time because they are busy so they do not have enough time to provide breast milk. Meanwhile, mothers who don't work have a lot of free time to provide proper breast milk, so mothers who don't work will have more time to breastfeed their babies than working mothers.

a. Average Baby Weight Gain in the Control Group

In this study, the average weight gain of babies in the control group of mothers who were not given Moringa leaf *simplicia* had a baby weight of 5000 grams (minimum score of 3470 grams and maximum 6100 grams). The baby's weight growth is normal. Within 14 days the baby's weight will increase according to his ability to breastfeed and get breast milk. Babies' weight generally increases by 170-220 grams per week or 450-900 grams per month during the first few months. Estimated normal baby weight occurs after birth.

This research is in line with research conducted by Djajanti (2019) that the weight gain in the control group was not very significant. The increase in baby weight in the treatment group was greater because it was influenced by nutritional factors and substances contained in Moringa leaf extract.

Nutrients needed by the body include carbohydrates as a source of energy for the body. Fat is obtained from the food consumed. This nutrient protein becomes energy for the body. Vitamins help chemical reactions in the body. Minerals have the same action as vitamins. Water can help our body temperature as a regulator of nutritional and chemical processes in the body (Astuti, et al, 2019). In this study, it was found that there was no significant change in the baby's weight gain because the mother

gave breast milk to her baby without consuming Moringa leaf *simplicia*.

b. Average Baby Weight Gain in the Treatment Group

In this study the number of respondents was 30 babies divided into two groups. The average body weight of babies in the treatment group after being given Moringa leaf *simplicia* was found to be 5,490 grams (minimum score 4040 grams and maximum 8470 grams). The frequency of breastfeeding babies is an average of 14-16 times per day, and babies urinate an average of 10-

The growth and development of a baby is determined by the amount of breast milk obtained, including the energy and other substances contained in breast milk (Gultom, 2018). After giving birth, the baby is given breast milk to fulfill the baby's nutrition. In fulfilling the nutrition of newborn babies by breastfeeding. Breastfeeding is an unbeatable way of providing food that is ideal for the healthy growth and development of babies and has unique biological and psychological influences on the health of mother and baby. The anti-infective substances contained in breast milk help protect babies against disease (Anggaini Y, 2020).

The reduced suction of the baby to the breast causes the stimulation of breast milk production to be less. This is what causes the baby's weight gain to be not optimal. Baby's weight gain is influenced by breast milk. Where in the treatment group that received Moringa leaf *simplicia*, it affected breast milk production because it contains phytosterol compounds which function to increase and facilitate breast milk. Apart from that, Moringa leaf *simplicia* also has excellent nutritional content, so that breast milk production in the treatment group contains high nutritional value (Sulastri, 2017).

Research conducted by Bunga (2022) shows that giving Moringa leaf extract capsules has an effect on breast milk production. It is hoped that midwives can apply this to breastfeeding mothers in the process of increasing breast milk production,

one of which is by consuming extra Moringa leaf capsules or consuming Moringa leaf vegetables so that breast milk production increases.

The effectiveness of adequate breast milk in terms of baby weight gain in the treatment group and control group at the Posyandu in the working area of Tembuku I Community Health Center

The results of the hypothesis test using the independent t test showed that the value was $p = 0.025$ ($\alpha = 0.05$), meaning that there was a difference in baby weight gain in the treatment group given Moringa leaf simplicia and the control group that was not given treatment. In other words, giving Moringa leaf simplicia to breastfeeding mothers affects the weight of babies in the posyandu in the working area of Tembuku I Community Health Center. This means that breast milk production in the treatment group given Moringa leaf simplicia was greater than breast milk production in the control group.

The results of this research are in line with Price's research, (2020) that Moringa leaves contain various kinds of nutrients and phytochemical sources. The low level of micronutrients consumed by breastfeeding mothers will affect the ability to provide breast milk with sufficient micronutrient content for the baby's growth and the results show that Moringa leaves can affect breast milk production in mothers.

In Zakaria's research, (2018). The results were found with a statistical test of p value $0.001 < 0.05$ so it can be concluded that Moringa leaf extract affects breast milk production in breastfeeding mothers. Meanwhile, in Djajanti's research, (2019), giving boiled water from Moringa leaves with a concentration of 10%, 20% and 40%, it was found that the results of administration in the 40% group were more effective than those in the

10% and 20% groups and were equally able to increase breast milk production in breastfeeding mothers.

In this study, Moringa leaf simplicia had an influence on weight gain in babies because Moringa leaves contain phytosterol compounds which function to stimulate breast milk production, so that breast milk production runs smoothly and the baby's weight gain occurs.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

Simplisa Moringa leaves have an influence on weight gain in babies because Moringa leaves contain phytosterol compounds which function to stimulate breast milk production, so that breast milk production runs smoothly and the baby's weight gain occurs.

SUGGESTION

Researchers hope that this research can become a reference for future researchers. So it can be used as additional knowledge in giving Moringa leaf simplicia for adequate breast milk for babies less than 6 months old.

REFERENCE

1. Almatsier, Sunita, (2018). *Prinsip Dasar Ilmu Gizi*. Jakarta: Gramedia Pustaka Utama.
2. Angaini, Y. (2020). *Asuhan Kebidanan Masa Nifas*. Yogyakarta: Pustaka Rihama
3. Anwar, F., Latif, S., Ashraf, M., Gilani, A.H. (2020). Moringa oleifera: a foodplant with multiple medicinal uses. *Phytother: Res*, 21, 17-25.

4. Astuti dkk,(2019). *Asuhan Kebidanan Masa Nifas dan Menyusui*. Jakarta. Trans infomedia
5. Arif,N (2009). *Panduan Ibu cerdas ASI dan Tumbuh kembang*. Yogyakarta: Media Pressindo.
6. Amalia, R. (2020). Hubungan Stres Dengan Kelancaran ASI Pada Ibu Menyusui Pasca Persalinan di RSI A. Yani Surabaya. *Jurnal Ilmiah Kesehatan, Vol.8, No. 1, Februari 2016*: 12-16
7. Arumaningrum, diah gayatri. (2020). *Pengaruh Senam Zumba terhadap Perubahan Berat Badan Pada Mahasiswa Keperawatan yang melakukan Senam Zumba Di Fakultas Ilmu Kesehatan Uin Alaudin Makasar*. *Lincoln Arsyad,3(2),1–46*.
<http://journal.stainkudus.ac.id/index.php/equilibrium/article/view/1268/1127>
8. Bahriyah, F., Putri, M., dan Jaelani, A. K. (2017). Hubungan Pekerjaan Ibu Terhadap Pemberian Asi Eksklusif Pada Bayi Di Wilayah Kerja Puskesmas Sipayung. *Jurnal Endurance, 2(2)*, 113-118.
9. Bharali, R., Tabassum, J., Azad, M. R. H. (2019). Chemomodulatory effect of Moringa oleifera Lam. On hepatic carcinogen metabolizing enzymes, antioxidant parameters, and skin papillomagenesis in mice. *Asian Pacific JCancer Prevent 4*.
10. Dinas Kesehatan Provinsi Bali. (2017). *Profil Kesehatan Provinsi Bali Tahun 2017*. Bali: Dinas Kesehatan Provinsi Bali
11. Djajanti, A. (2019). Uji Efek Pelancar ASI Air Rebusan Daun Kelor (*Moringa oleifera* (Lamk) Pada Mencit. *Jurnal Uji Efek Pelancar ASI* : 1-6.
12. Fahey, J.W. (2018). Moringa oleifera: A Review of the Medical Evidence for Its Nutritional, Therapeutic, and Prophylactic Properties. Part 1.
<http://www.TFLJournal.org/article.php/20051201124931586>.
- Fuglie, L.G. (2018). *The Miracle Tree: The Multiple Attributes of Moringa*. CTA. Netherland. 172 hal.
13. Gultom, L. (2019). Hubungan Pengetahuan Ibu Bekerja Tentang Manajemen Laktasi dan Dukungan Tempat Kerja Dengan Perilaku Ibu Dalam Pemberian ASI. *Jurnal Ilmiah PANNMED Vol. 12 No. 1 Mei 2017* : 2
14. Jeniawaty, S. (2019). Asuhan Keperawatan Psikososial Pada Ibu Nifas Dalam Menghadapi ASI Belum Keluar Pada 0-3 Hari Pasca Persalinan. *Jurnal Ners Vol. 11 No. 2 Oktober 2019*: 159-173.
15. Kemenkes RI. (2019). *Dukung Ibu Bekerja Beri ASI Eksklusif*. Jakarta Kementerian Kesehatan RI
16. Kusumah, H., Toro, A., dan Idris, M. (2018). *Sistem Pengukur Tinggi Dan Berat Badan Untuk Posyandu Menggunakan Mikrokontroler atmega8535*. *Ccit Journal,9(2)*,168–178.
<https://doi.org/10.33050/ccit.v9i2.496>
17. Khasanah, N, Liliانا, A., dan Sandra, C. J. W. (2021). Perbandingan Kecukupan Asi Ibu Menyusui Antara Konsumsi Ekstrak Daun Kelor dengan Konsumsi Ekstrak Biji Fenugreek . *HEALTH CARE : JURNAL KESEHATAN,10(2)*,239-244.
18. Mansyur, dan Dahlan. (2019). *Asuhan Kebidanan Masa Nifas*. Malang: Selaksa Media
19. Mastiningsih, P., dan Agustina, Y. C. (2019). *Buku Ajar Asuhan Kehamilan*. Bogor: In Media.
20. Marmi dan Raharjo, (2019) *Menyusui Cara Mudah, Praktis, dan Nyaman*, Jakarta : Arcan Jurnal Ekologi Kesehatan Vol 2 No 2, 2003, hal :249-254
21. Notoatmojo, S. (2018). *Metodologi Penelitian Kesehatan*. 2018. Jakarta: Rineka Cipta
22. Nurhasanah. (2019). *Alat Pengukur Berat Badan, Tinggi Badan dan Lingkar Kepala Bayi*

- dengan Tampilan PC (Berat Badan bayi). 151, 10–17.*
23. Onainor, (2019) Faktor yang Berhubungan dengan Pemberian ASI Eksklusif pada Ibu Bekerja di Kabupaten Ogan Komering Ulu. *Jurnal Kesehatan Andalas*.2019; 8(3).
 24. Prince Edwin Das, et al., (2020). Green Synthesis of Encapsulated Copper Nanoparticles Using a Hydroalcoholic Extract of *Moringa oleifera* Leaves and Assessment of Their Antioxidant and Antimicrobial Activities. *JournalMolecules*
 25. Rahayu, Indriyasari (2019). Efektivitas Daun Kelor (*Moringa Oleifera*) Sebagai Galaktogog Pada Ibu Menyusui : *An Update Systematic Review*
 26. Salsabila. (2017).*Pengaruh Daun Kelor Terhadap Produksi Asi Pada Ibu Post- Partum Di Wilayah Kerja Puskesmas Sekaran*. Prodi Div Kebidanan Semarang Poltekkes Kemenkes Semarang
 27. Suherni, dkk. (2019). Perawatan Ibu Nifas. Yogyakarta : Fitramaya
 28. Sulastri, W. (2017). Hubungan Tingkat Kecemasan Ibu Dengan Pemberian ASI Pada Masa Nifas Di Puskesmas Umbulhardjo 1 Yogyakarta Tahun 2017. *Jurnal Ilmiah Tingkat Kecemasan Dengan Pemberian ASI*. 2017 : 1-8
 29. Shoffiyah Y, Farich A, Maternity D, Yuviska IA. Pengaruh Pemberian Kapsul Kelor Terhadap Produksi Asi. *J Kebidanan Malahayati* 2021;7:93–8. <https://doi.org/10.33024/jkm.v7i1.2338>.
 30. UNICEF, W. (2017). Panduan Peserta. Pelatihan Konseling Menyusui. Winarno, F. G. (2017). Tanaman Kelor (*Moringa Oleifera*) Nilai Gizi,
 31. Manfaat, Dan Potensi Usaha. PT. Gramedia Pustaka Utama. Jakarta. 109 hal.02
 32. Wahyuni, E. D. (2018). Asuhan Kebidanan Nifas dan Menyusui. Jakarta: Kementerian Kesehatan RI.
 34. Zakaria dan Suryani (2018). Pengaruh Pemberian Ekstrak Daun Kelor Terhadap Kuantitas dan Kualitas Air Susu Ibu (ASI) Pada Ibu Menyusui 0-6 Bulan. *Jurnal Pengaruh Pemberian Ekstrak Daun Kelor Terhadap Kuantitas Air Susu Ibu (ASI)* : 161-169.