

Knowledge and Behavior regarding Consumption of Herbal Galactagogues among Breastfeeding Women in Mataram City

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ABSTRACT

Mataram city occupied the region with the lowest coverage of exclusive breastfeeding in West Nusa Tenggara in 2022. One of the causes of the failure of exclusive breastfeeding is the lack of breast milk production. Galactagogues are substances that can increase breast milk production. A relatively safe alternative to support breast milk production is to consume herbs containing galactagogues. It is essential to trace local culture, knowledge, and behavior regarding herbal galactagogues to get insight into the types of galactagogues, their properties as well as side effects. Scientific studies are required to be used as a reference for breastfeeding women. This study aims to describe knowledge and behavior of breastfeeding women regarding the consumption of galactagogues. The study applied mixed-method design with a cross-sectional approach to conduct a survey on knowledge and behavior regarding consumption of herbal galactagogues. Data were collected by distributing questionnaires to respondents who were selected based on inclusion criteria, namely breastfeeding women with children aged 0 to 6 months, domiciled in the city of Mataram and registered at the Community Health Center in the city of Mataram, as many as 124 people. It was found that most of respondent had a poor level of knowledge by 62.1%, while 37.1% of them had good consumption behavior of herbal galactagogues. It can be concluded that generally, the people of Mataram City consumed herbal galactagogues more often based on empirical evidence from generation to generation. Thus, additional information regarding variations of other herbal galactagogues is required to support exclusive breastfeeding coverage.

Kota Mataram merupakan wilayah kabupaten terendah untuk capaian ASI eksklusif di Nusa Tenggara Barat pada tahun 2022. Salah satu penyebab kegagalan pemberian ASI eksklusif adalah kurangnya produksi ASI. Galaktogog adalah substansi yang dapat meningkatkan produksi ASI. Alternatif yang relatif aman digunakan dalam menangani produksi ASI yang kurang lancar adalah dengan mengkonsumsi herbal yang mengandung galaktogog. Kebudayaan dan pengetahuan perilaku setempat tentang galaktogog herbal, penting ditelusuri guna mendapatkan gambaran wawasan jenis galaktogog serta khasiatnya sekaligus efek samping dan kajian saintifik agar dapat digunakan sebagai referensi bagi ibu menyusui. Tujuan penelitian ini adalah untuk memperoleh gambaran tingkat pengetahuan dan perilaku ibu menyusui tentang konsumsi galaktogog. Desain penelitian yaitu mixed method research. Pendekatan yang dilakukan yaitu dengan pendekatan cross-sectional untuk survei pengetahuan dan perilaku konsumsi galaktogog herbal yang dilakukan dengan membagikan kuesioner kepada responden dengan kriteria inklusi yaitu ibu menyusui dengan anak 0 s.d 6 bulan, yang berdomisili di Kota Mataram dan terdaftar di Puskesmas yang ada di Kota Mataram sebanyak 124 orang. Pengetahuan responden tentang galaktogog herbal tergolong pada kategori kurang (62,1 %) sedangkan perilaku konsumsi galaktogog herbal tergolong pada kategori baik (37,1%). Dari hal tersebut dapat disimpulkan bahwa umumnya masyarakat Kota Mataram lebih sering mengkonsumsi galaktogog herbal berdasarkan bukti empiris secara turun temurun,

Introduction

Exclusive breastfeeding is given to babies until six months of age without any additional food or drinks. The American Academy of Pediatrics recommends the minimum duration of exclusive breastfeeding for six months, but optimally it should continue for at least one year. Mataram city occupied the region with the lowest coverage of exclusive breastfeeding in West Nusa Tenggara in 2022 by only 51.5%. In fact, NTB was the province in Indonesia with the highest exclusive breastfeeding coverage. This data could motivate the achievement of national coverage in accordance with Government Regulation number 33 of 2012 article 6, which states that the target for exclusive breastfeeding in Indonesia is 100%. Exclusive breastfeeding is a human right for both mother and baby. Arrangements regarding exclusive breastfeeding are regulated in Article 128 of Law no. 36 of 2009 concerning Health which states that every baby has the right to receive exclusive breast milk from birth for 6 (six) months, except for medical indications. Exclusive breastfeeding has benefits for both mother and baby. Inhibiting factors in EIB (Early Initiation of Breastfeeding) and exclusive breastfeeding include lack of knowledge about breastfeeding, lack of support from the environment, lack of media information, women who return to work, and psychological conditions of women and women who experience preterm birth. Non-pharmacological interventions are the first line of solutions to overcome the side effects feared by babies who consume breast milk, one of which is by consuming herbal galactagogues.

Galactagogues are synthetic compounds, foods or drinks, and herbs that function to trigger breast milk production (Antonia, Jennifer, & Lea, 2012). Galactagogues can exist in the form of foods such as banana flowers, lemon basil, Thai basil, chicken meat, fish meat, pumpkin, and others; drugs such as metoclopramide, domperidone, chlorpromazine, and sulphiride, as well as plants that have medicinal properties (Buntuchai, Pavadhgul, Kittipichai, & Satheannoppakao, 2017). Pharmacological medications such as sulphiride, metoclopramide, domperidone, and thyrotropin-releasing hormone are known to have side effects in long-term consumption. High doses of domperidone increase the risk of arrhythmias and heart attacks, while long-term use of metoclopramide will trigger maternal depression and tardive dyskinesia (Philip, 2013; Haase, Taylor, Mauldin, Johnson, & Wagner, 2015). Domperidone is effective as a prokinetic and antiemetic and has also been shown to increase milk production in breastfeeding women. Domperidone is the first choice compared to other synthetic galactagogues since there are no side effects on the baby, and side effects rarely occur in breastfeeding women. However, domperidone is still a concern for the FDA, especially for side effects related to heart rhythm disturbances. Side effects include stomach cramps, dry mouth, headaches, and additional side effects include constipation and depression (William & Carrey, 2022).

The public prefers herbal galactagogues because they have fewer side effects than chemical galactagogues. Galactagogue herbal tea was known for its efficacy in increasing breast milk production and newborn weight (Lopresti, 2017; Turkyilmaz et al., 2011). Jamu Uyup-Uyup, for example, is an

example of a galactagogue with Indonesian local wisdom, especially among Javanese people (Hayati et al., 2019). Examples of other herbal galactagogues include banana flower, fennel, fenugreek, ginger, moringa, palm dates, *katuk*, shatavari, silymarin, caraway, thyme, and mixtures that are usually made into teas and soups (Rizqi, Surtisminah, & Adyani, 2022). Chamomile was also found to increase milk production (Khorshidian et al., 2019; Silva, Dias, Costa, & da Garca Campos, 2018). Among these herbal galactagogues, some have been scientifically studied by determining daily doses for consumption. Particularly in NTB, there are several local plant names known for their efficacy as galactagogues, such as *turi* (*Sesbania grandiflora*), moringa (*Moringa oleifera*), spinach (*Amaranthus* sp.), and *katuk* (*Sauropus androgynus*). Aside from having potential benefits and efficacy, herbal galactagogues also have certain disadvantages regarding certain side effects (Foong et al., 2020; Shawahna, Qiblawi, & Ghanayem, 2018). Research on herbal galactagogues, both in terms of knowledge and behavior among breastfeeding women who consume herbal galactagogues, is urgently needed as an effort to support government programs to achieve exclusive breastfeeding target so as to create golden generation. This study aims to describe knowledge and behavior of breastfeeding women regarding the consumption of galactagogues.

Methods

The study applied mixed-method design with a cross-sectional approach to conduct a survey on knowledge and behavior regarding consumption of herbal galactagogues. Data were collected by distributing questionnaires to respondents. Samples were selected by using purposive sampling technique based on inclusion criteria, namely breastfeeding women with children aged 0 to 6 months, domiciled in the city of Mataram and registered at the Community Health Center in the city of Mataram, as many as 124 of 180 people. Survey personnel were trained midwives with experience in research data collection. The characteristics of the respondents include age, education, and occupation. The survey instrument involved demographic data, use of herbal galactagogue, sources of herbal galactagogue, and opinions about the side effects or benefits. The knowledge and behavior questionnaire applied here had been validated and tested for reliability by the International Board-Certified Lactation Consultant® (Othman, Che Lamin, & Othman, 2014). According to Arikunto (2013), the results of knowledge assessment can be grouped into three categories, namely: Good (76%-100%), Moderate (56%-75%), and Poor ($\leq 55\%$). As for the results of behavior assessment can be grouped into three categories, Very Good (81%-100%), Good (61%-80%), Moderate (41%-60%), Poor (21%-40%), and Very Poor (0-20%).

Results

Table 1. Distribution of Respondents' Characteristics

Characteristic	Variable	n	%
Age	a. < 20 years	4	3.23
	b. 20-35 years	104	83.87
	c. >35 years	16	12.90
Total		124	100
Education Level	a. Elementary School	14	11.29

Characteristic	Variable	n	%
	b. High School	75	60.48
	c. Higher Education	35	28.22
	Total	124	100
Employment Status	a. Employed	31	25
	b. Unemployed	93	75
	Total	124	100
Breastfeeding Experience	a. < 6 months	96	77.41
	b. ≥ 6 months	28	22.59
	Total	124	100
Herbal Galactagogue Information	a. Yes	101	81.45
	b. No	23	18.54
	Total	124	100

Data presented in Table 1 indicated that most of respondents were in the healthy reproductive age range of 20-35 years (83.87%). Another characteristic that supported the respondents' knowledge, in this case, was the level of education. Most of respondents had a secondary educational background (60.48%). Regarding the employment status, most of respondents (75%) were unemployed (housewives). Furthermore, regarding breastfeeding experience, most of respondents breastfed for less than six months (77.41%). In such a situation, mothers should have time to find the processing of herbal galactagogue sources that can facilitate breastfeeding so as to encourage optimal exclusive breastfeeding. Moreover, it is supported by the condition that most of the respondents had exposure to information about herbal galactagogues (breastfeeding boosters) from generation to generation (81.45%).

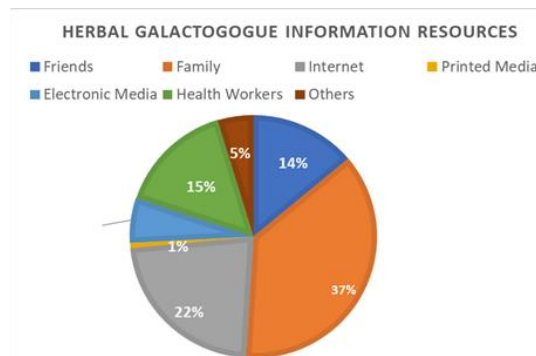


Figure 1. Sources of Information regarding Herbal Galactagogues

Based on the figure above, most of respondents obtained information about herbal galactagogues from relatives/family (37%), more that from friend, electronic media, health workers, internet, printed media and other (<37%)

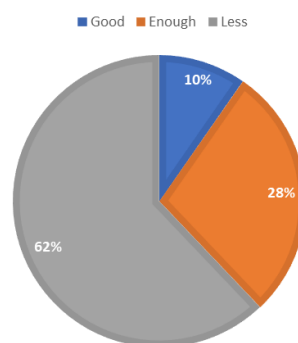


Figure 2. Distribution of Knowledge on Herbal Galactagogues

Based on Figure 2, it was shown that 62% of respondents had poor level of knowledge about Herbal Galactagogues, 28% of respondents had moderate level and 10% of respondents had good level of knowledge.

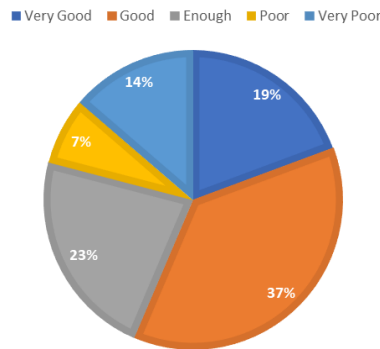
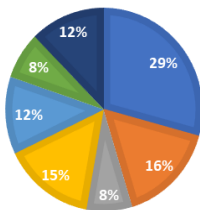


Figure 3. Distribution of Herbal Galactagogue Consumption Behavior

Based on Figure 3, it was shown that 37% of respondents had good behavior in consuming herbal galactagogues in their daily life.

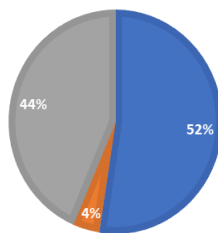
REASONS TO CHOOSE GALACTOGOG HERBAL

- Less milk production
- As a supplement
- Post Partum Care
- Safe
- Easy to get
- Cheap
- Others



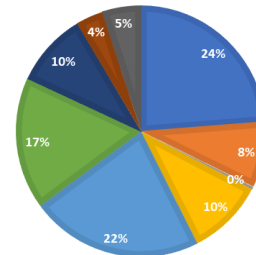
SATISFACTION CONSUMING HERBAL GALACTOGOGUE

- Satisfied
- Unsatisfied
- Don't know



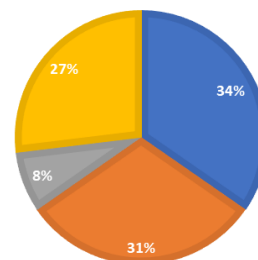
HERBAL GALACTOGOG PREFERENCE

- Sauropus androgynus
- Trigonella foenum-graecum
- Moringa oleifera
- Glycine max
- Others
- Prunus dulcis
- Phoenix dactylifera
- Sesbania grandiflora
- Jamu



HOW TO OBTAIN HERBAL GALACTOGOGUE

- Buy at shop
- Mixing by own
- Mixing by others
- Others



SELECTION BACKGROUND OF THE GALACTOGOG

- Other experiences
- Scientific references
- Health workers suggestion
- Personal instinct
- Others

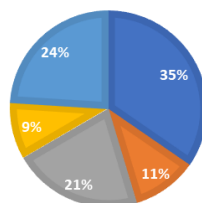


Figure 4. Respondents' Responses to the Consumption of Herbal Galactagogues

Based on Figure 4, it was revealed that most of respondents consume herbal galactagogues due to the lack of breastmilk production (29%). Herbal galactagogues often consumed by most of

respondents was *katuk* leaves (*Sauropus androgynus*) (24%). Furthermore, most of respondents bought such galactagogues at shop (34%) to obtain the herbal galactagogues and satisfied about the effect (52%). Most of respondents chose to consume herbal galactagogues due to motivation from other people's experiences (35%) compared from personal instinct, scientific references, healthcare worker recommendation and other.

Discussion

Data presented in table 1 showed that most of respondents were in the healthy reproductive age range of 20-35 years (83.87%), and were still included in the ideal marriage age category for women according to Marriage Law No. 1 of 1974. Age maturity was an essential factor that influenced a person's level of knowledge (Khairiah, 2017). Another characteristic that supported the respondents' knowledge, in this case, was the level of education. Most of respondents had a secondary educational background (60.48%). Consumption of herbal galactagogues was closely related to exclusive breastfeeding. By consuming herbal galactagogues, the exclusive breastfeeding target can be optimally achieved immediately. According to Assriyah, Indriasari, Hidayanti, Thaha, & Jafar (2020), factors that affected exclusive breastfeeding were maternal characteristics (knowledge, education, occupation, age, parity, and ethnicity), infant characteristics (birth weight and condition of infant health), environment (faith, family support, housing and socio-economic) and health services (pregnancy checkup, lactation counseling, birthplaces, birth attendants and policies). Regarding the employment status, most of respondents (75%) were unemployed (housewives). Furthermore, regarding breastfeeding experience, most of respondents breastfed for less than six months (77.41%) so that the respondents might have poor level of knowledge and behavior regarding the consumption of herbal galactagogues. In such a situation, mothers should have time to find the processing of herbal galactagogue sources that can facilitate breastfeeding so that exclusive breastfeeding becomes optimal. Moreover, it is supported by the condition that most of the respondents have received exposure to information about herbal galactagogues (breastfeeding boosters) from generation to generation (81.45%), most of which were obtained from relatives/family (37%). Knowledge or information obtained from relatives/family was generally hereditary knowledge passed down from generation to generation, so this becomes empirical evidence of the safety of herbal galactagogue consumption.

Based on the respondent's acknowledgment, it was found that the reason for the respondent to consume the herbal galactagogue was due to the lack of breast milk production. It meant that respondents knew that they must consume herbal galactagogue to facilitate optimal exclusive breastfeeding for their babies. However, from a holistic midwifery therapy perspective, there were several things to do to strive for good breast milk production non-pharmacologically, namely relaxation techniques (yoga, hypno-breastfeeding, aromatherapy, acupressure, spa therapy, acupuncture, oxytocin massage) as well as pharmacologically, namely consumption of synthetic galactagogue and other chemical drugs (Yuliani, Larasati, Setiwandari, & Nurvitriana, 2022).

Based on Figure 4, the herbal galactagogues often consumed by most of respondents was *katuk* leaves (*Sauropus androgynus*) by 24%. There was an effect of giving *katuk* leaves decoction on the production of breast milk among postpartum women (Dolang, Wattimena, Kiriwenno, Cahyawati, & Sillehu, 2021). The increase in the amount of breast milk production experienced by respondents was due to the contents of *katuk* leaves including protein, potassium, phosphorus, iron, and vitamins A, B1, and vitamin C. 100 grams of *katuk* leaves contain 239 mg of vitamin C, much more sufficient to meet the needs of breastfeeding women. *Katuk* leaves were suitable for facilitating breast milk production since they contain sesquiterpene acid. Besides being rich in protein, fat, and minerals, *katuk* leaves are enriched with vitamins A, B, and C, then tannins, saponins, and papaverine alkaloids. The content of alkaloids and sterols in *katuk* leaves can increase breast milk production since it can increase glucose metabolism for lactose synthesis that further increase breast milk production. The Australian Dietary Guidelines recommend consuming green vegetables, one of which is *katuk*, as a healthy food for breastfeeding women (Pattinson et al., 2021). In this study, it was found that respondents were satisfied with the efficacy of the herbal galactagogues.

Based on the data, it was found that, in general, most of respondents chose to consume herbal galactagogues due to motivation from other people's experiences compared from personal instinct, scientific references, healthcare worker recommendation and other. Someone believes more in empirical evidence than suggestions or references from other sources. Generally, the way to obtain these herbal galactagogues is by buying them in stores because these respondents wanted to consume them practically.

It was found that most of respondents had a poor knowledge on herbal galactagogues (fig.1). Most of respondents needed to learn more about the types of plants that are effective as herbal galactagogues, such as *katuk* leaves which are usually consumed by making soup. Even though many other plants have the potential as herbal galactagogues, including ginger, almond, date palm juice, fenugreek, cumin, fennel, moringa, *turi*, soybean, caraway, and many other types of plants, herbal galactagogues can be made into soup, tea, sweets, milk, juice or pills or capsules. Daily food or vegetables consumed can be classified as herbal galactagogues. Respondents also processed these herbal ingredients into food or drinks consumed for nutrition and medicine. The perception that breastfeeding was only applied for non-working women was still attached to the respondents' mindset. They generally stopped breastfeeding if there was poor breast milk production, they were sick or should back to work, or they did not have time. Exclusive breastfeeding can be pursued with the consumption of galactagogues to facilitate breast milk production. In addition, expressed breast milk can still be given when they were sick or working, and there was no time for breastfeeding since infants have the right to get breast milk.

In their daily life, most of respondents had good behavior in consuming herbal galactagogues (fig. 3). Respondents were included in the very good category if they performed routine exclusive breastfeeding, made every effort to provide exclusive breastfeeding to their babies, had heard information about herbal galactagogues and consumed herbal galactagogues regularly supported by other therapeutic efforts to support exclusive breastfeeding. Furthermore, respondents had investigated

the side effects of consuming herbal galactagogues before consuming them. In support of exclusive breastfeeding, respondents had made other efforts besides consuming herbal galactagogue, such as doing oxytocin massage or compressing the breasts even though they did not consumed galactagogue regularly (only when there was a decrease in breast milk volume). The moderate category indicated that respondents performed routine exclusive breastfeeding, made every effort to be able to provide exclusive breastfeeding to their babies, had heard information about herbal galactagogues, and applied knowledge about herbal galactagogues to achieve exclusive breastfeeding target. Such respondents did not search for the side effects of consuming herbal galactagogue before consuming it. In support of exclusive breastfeeding, the respondents also did not make other efforts besides consuming herbal galactagogues, such as doing oxytocin massage or compressing the breasts, even though they did not consumed galactagogue regularly (only when there was a decrease in breast milk volume). Furthermore, the poor category indicated that respondents performed routine exclusive breastfeeding, made every effort to be able to provide exclusive breastfeeding to their babies, had heard information about herbal galactagogues, and did not apply knowledge about herbal galactagogues to achieve exclusive breastfeeding target. Such respondents did not search for the side effects of consuming herbal galactagogue before consuming it. In support of exclusive breastfeeding, the respondents also did not make other efforts besides consuming herbal galactagogues, such as doing oxytocin massage or compressing the breasts, even though they did not consumed galactagogue regularly (only when there was a decrease in breast milk volume). The last of very poor category indicated that respondents did not perform routine exclusive breastfeeding, did not make every effort to be able to provide exclusive breastfeeding to their babies, had never heard of any information about herbal galactagogue, and did not apply knowledge about herbal galactagogue in order to achieve exclusive breastfeeding target. Such respondents did not search for the side effects of consuming herbal galactagogue before consuming it. In support of exclusive breastfeeding, the respondents also did not make other efforts besides consuming herbal galactagogues, such as doing oxytocin massage or compressing the breasts, even though they did not consumed galactagogue regularly (only when there was a decrease in breast milk volume).

Conclusions

Breastfeeding women in the city of Mataram still had insufficient knowledge about herbal galactagogues even though behavior regarding the consumption of herbal galactagogues in their daily lives was relatively good. The people of Mataram City consumed more herbal galactagogues based on empirical evidence from generation to generation. Therefore, it is necessary to provide additional information regarding variations of other herbal galactagogues to support the target achievement of exclusive breastfeeding. By knowing alternative methods of increasing breast milk production, it is expected that breastfeeding women and healthcare workers can have a better knowledge which further lead to successful campaign regarding exclusive breastfeeding. In addition, successful campaign regarding exclusive breastfeeding may provide a new perspective that there are no obstacles to

breastfeeding, except for people living with AIDS. The selection of appropriate herbal galactagogues is an effort that can be a good alternative in supporting the exclusive breastfeeding target.

References

- Antonia, Z., Jennifer, G. S., & Lea, S. (2012). Use of Herbals as Galactagogues. *Journal of Pharmacy Practice*, 25(2), 222–231.
- Assriyah, H., Indriasari, R., Hidayanti, H., Thaha, A. R., & Jafar, N. (2020). Hubungan pengetahuan, sikap, umur, Pendidikan, pekerjaan, psikologis, dan inisiasi menyusui dini dengan pemberian ASI eksklusif di Puskesmas Sudiang. *Jurnal Gizi Masyarakat Indonesia*, 9(1), 30–38.
- Buntuchai, G., Pavadhgul, P., Kittipichai, W., & Satheannoppakao, W. (2017). Traditional Galactagogue Foods and Their Connection to Human Milk Volume in Thai Breastfeeding women. *Journal of Human Lactation*, 33(3), 552–559.
- Dolang, M. W., Wattimena, F. P., Kiriwenno, E., Cahyawati, S., & Sillehu, S. (2021). Pengaruh Pemberian Rebusan Daun Katuk terhadap Produksi Asi Pada Ibu Nifas. *JUMANTIK (Jurnal Ilmiah Penelitian Kesehatan)*, 6(3), 256–261.
- Foong, S. C., Tan, M. L., Foong, W. C., Marasco, L. A., Ho, J. J., & Ong, J. H. (2020). Oral galactagogues (natural therapies or drugs) for increasing breast milk production in mothers of non-hospitalised term infants. *Cochrane Database of Systematic Reviews*, 5(5), CD011505.
- Haase, B., Taylor, S. N., Mauldin, J., Johnson, T. S., & Wagner, C. L. (2015). Domperidone for Treatment of Low Milk Supply in Breast Pump-Dependent Mothers of Hospitalized Premature Infants: A Clinical Protocol. *Journal of Human Lactation*, 32(2), 373–381.
- Hayati, S. N., Apriyana, W., Rosyida, V. T., Indrianingsih, A. W., Nisa, K., Ratih, D., & Indirayati, N. (2019). Pre-Formulation and Evaluation of Jamu Uyup-Uyup (an Indonesian Herbal Galactagogue). *IOP Conference Series: Earth and Environmental Science*, 251(1), 012022.
- Khairiah, M. (2017). *Hubungan Pengetahuan Wanita Usia Premenopause tentang Osteoporosis dengan Perilaku Pencegahan Osteoporosis (Di Dusun Bareng Desa Bareng Kecamatan Bareng Kabupaten Jombang)*. STIKES Insan Cendikia Medika Jombang.
- Khorshidian, N., Mahboubi, A., Kalantari, N., Hosseini, H., Yousefi, M., Arab, M., ... Mahdavi, F. (2019). Chitosan-coated alginate microcapsules loaded with galactagogue herbs extract: formulation optimization and characterization. *Iranian Journal of Pharmaceutical Research*, 18(3), 1180–1195.
- Lopresti, A. L. (2017). Curcumin for neuropsychiatric disorders: A review of in vitro, animal and human studies. *Journal of Psychopharmacology*, 31(3), 287–302. <https://doi.org/10.1177/0269881116686883>
- Othman, N., Che Lamin, R. A., & Othman, C. N. (2014). Exploring Behavior on the Herbal Galactagogue Usage among Malay Lactating Mothers in Malaysia. *Procedia - Social and Behavioral Sciences*, 153(2014), 199 – 208.
- Pattinson, A. L., Seimon, R. V., Harper, C., Nassar, N., Grech, A., Santoso, E. A., ... Sainsbury, A. (2021). Diet Quality following Total Meal Replacement Compared with Food-Based Weight-Loss Diets in Postmenopausal Women with Obesity: A Secondary Analysis of the TEMPO Diet Trial. *The Journal of Nutrition*, 151(11), 3299–3312.
- Philip, O. A. (2013). The Galactagogue Bandwagon. *Journal of Human Lactation*, 29(1), 7–10.
- Rizqi, L., Surtisminah, E., & Adyani, K. (2022). Efektifitas Tanaman Lokal sebagai Galactagogue untuk Meningkatkan Produksi Air Susu Ibu. *Jurnal Penelitian Kesehatan SUARA FORIKES*, 13(1), 14–17.
- Shawahna, R., Qiblawi, S., & Ghanayem, H. (2018). Which Benefits and Harms of Using Fenugreek as a Galactagogue Need to Be Discussed during Clinical Consultations? A Delphi Study among Breastfeeding Women, Gynecologists, Pediatricians, Family Physicians, Lactation Consultants,

and Pharmacists. *Evidence-Based Complementary and Alternative Medicine*.
<https://doi.org/10.1155/2018/2418673>

- Silva, F. V., Dias, F., Costa, G., & da Garca Campos, M. (2018). Chamomile reveals to be a potent galactagogue: the unexpected effect. *The Journal of Maternal-Fetal & Neonatal Medicine*, 31(1), 116–118.
- Turkyılmaz, C., Onal, E., Hirfanoglu, M., Turan, O., Koc, E., Ergekon, E., & Atalay, Y. (2011). The Effect of Galactagogue Herbal Tea on Breast Milk Production and Short-Term Catch-Up of Birth Weight in the First Week of Life. *The Journal of Alternative and Complementary Medicine*, 17(2), 139–142.
- William, V., & Carrey, M. (2022). Domperidone untuk Meningkatkan Produksi Air Susu Ibu (ASI). *Cermin Dunia Kedokteran*, 43(3), 225–228.
- Yuliani, N. R., Larasati, N., Setiwandari, S., & Nurvitriana, N. C. (2022). Peningkatan produksi ASI ibu menyusui dengan tatalaksana kebidanan komplementer. Retrieved September 10, 2022, from Seminar Nasional Hasil Riset dan Pengabdian (SNHRP) website: <https://snhrp.unipasby.ac.id/prosiding/index.php/snhrp/article/view/166>