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Reflection on the Use of Galactagogues (Both Chemical and Herbal) in Increasing Breast Milk Production in the Pontang Community Health Center Working Area

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ABSTRACT

Introduction: *Based on data from the Banten Provincial Office, the coverage of exclusive breastfeeding in Banten Province in 2017 was 75.7%, which did not meet the target set in 2016 in Banten Province (77%). The suboptimal rate of exclusive breastfeeding may be due to the low amount of breast milk produced by mothers. This study was conducted to determine the benefits of chemical galactagogues and herbs in increasing breast milk production in the Pontang Community Health Center working area. The population in this study consisted of 32 breastfeeding mothers with children aged 0-6 months in the Pontang Community Health Center working area, comprising 16 chemical and 16 herbal mothers. This study will be conducted in May-June 2024 at the Pontang Community Health Center.*
Methods: *The research method used is a quasi-experiment with a cross-sectional approach. Data collection was carried out using breast milk pumps and breast milk bags. The data were then analyzed using univariate and bivariate (influence analysis) methods.*
Results: *The results showed a significant p-value of 0.000 between galactagogues and increased breast milk production in the chemical intervention group compared to the herbal intervention group.*
Conclusions: *The paired sample T-test showed a difference in mean values between the chemical intervention group and the herbal intervention group of 12.18, which means that the average breast milk production in the herbal group was much greater than the average breast milk production in the chemical group. It is hoped that health workers can provide information and disseminate or provide counseling when conducting practical visits about the benefits of galactagogues to the community, especially breastfeeding mothers.*

Introduction

Breast milk is the ideal nutrition for babies because it contains nutrients that are best suited to their needs and a set of substances that protect them from various diseases. Feeding a baby only breast milk without any other food or drink until the baby is 6 months old is called exclusive breastfeeding (Ningsih, Fitria, et al., 2024). Breastfeeding should then continue until the baby is 2 years old, even if the baby is already eating other foods. Infants who are not exclusively breastfed are at higher risk of developing illnesses such as gastrointestinal infections, malnutrition, and developmental delays, and may have an increased risk of infant mortality. Exclusive breastfeeding reduces mortality due to infection by 88% in infants under 3 months of age and by 31.36% (82%) of 37.95% of children who are sick because they did not receive exclusive breastfeeding (Pérez-Escamilla et al., 2023). The use of galactagogues (herbs such as katuk leaves, moringa, fenugreek, or chemicals) is very important for increasing milk production

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because they help raise prolactin and oxytocin hormones, overcome the perception of insufficient milk, and facilitate milk flow, especially with evidence of the effectiveness of local herbs that are relatively safe to use, although further research on long-term safety and efficacy is still needed.

The benefits for mothers who breastfeed include effective contraception during the first six months, a reduced risk of breast cancer, weight loss, and a sense of pride and purpose. Insufficient milk production that is not addressed immediately can cause worry and anxiety in mothers (Ningsih, Yunarsih, et al., 2024). This condition causes mothers to feel anxious, fearful, and apprehensive about not being able to breastfeed optimally. If left unaddressed, this can lead to postpartum blues (Ersan, 2015).

Based on WHO data from 2015, exclusive breastfeeding worldwide is less than 40%. According to the Indonesian Ministry of Health, the rate of exclusive breastfeeding in 2017 was 61.33%. Based on data from provinces in Indonesia, the coverage of babies receiving exclusive breastfeeding in 2017 in Banten Province was 75.7%. This coverage has increased year on year since 2011 (61.5%). Overall, the achievement in Banten Province (75.7%) has not met the target set in 2016 for Banten Province (77%). There are 5 districts/cities that have met the target, while 3 other districts/cities have not yet reached the target. The percentage of exclusive breastfeeding in Serang District fluctuated from 2012 (71.13%) to 2015 (79.13%) and 2017 (78.92%).

Based on data from the Serang District Health Office in 2017, there were 1,025 infants who did not receive exclusive breastfeeding (Indonesian Ministry of Health, 2017; Banten Provincial Health Office, 2017; Serang District Health Office, 2017; WHO, 2015). The low rate of exclusive breastfeeding may be due to mothers producing insufficient amounts of breast milk. This is supported by data obtained by the Indonesian health research and development agency, which found that in 2010, 46% of insufficient breast milk production was due to poor breast care, 25% was due to breastfeeding less than 8 times a day, 14% due to low birth weight (LBW), 10% due to prematurity, and 5% due to chronic or acute illness (Depkes, 2015).

Several efforts have been made to increase breast milk production, including counseling to improve behaviors that do not support exclusive breastfeeding, such as improving the position and attachment of the baby to the mother, increasing the frequency of breastfeeding, increasing the duration of breastfeeding, and offering both breasts at each feeding (Ningsih, Masyayih, et al., 2023). Additional efforts have also been made using galactagogues, which are drugs or other substances believed to initiate, maintain, or increase breast milk production (Ningsih, Sakinah, et al., 2023). Galactagogues have been extensively studied and used to increase and maintain breast milk production, including in cases of prematurity, failure to thrive, adoption, and separation of mother and baby due to illness of the mother or baby. (Panjaitan, 2013)

Galactagogues are foods or medicines used to stimulate, maintain, and increase breast milk production (Ningsih, 2025). Considerations for using galactagogues include whether the substance is effective, safe, and when it should be used. Several types of galactagogues known to date are divided into two types, namely chemical and herbal medicines (Bazzano et al., 2016). Chemical drugs used to increase breast milk production include metoclopramide, domperidone, sulpiride, chlorpromazine, growth hormone, thyrotropin-releasing hormone, and oxytocin. Metoclopramide, sulpiride, and chlorpromazine are no longer widely used because they cause extrapyramidal side effects, which are disorders of the extrapyramidal system in the brain that cause the patient to make involuntary or uncontrollable movements. Meanwhile, growth hormone, thyrotropin-releasing hormone, and oxytocin still require further research (Azriani & Handayani, 2016).

Herbal galactagogues are used to treat low milk production, for example fenugreek (Trigonella foenum-graecum), turi leaves, fennel, torbangun (Colanus amboinicus Lour), katuk leaves, and moringa leaves. The use of herbal galactagogues still requires further research to

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ensure that these ingredients are effective as breast milk stimulants and safe for consumption (Atik et al., 2016).

The effectiveness of galactagogues is also important to consider. Several studies related to the use of domperidone as a milk booster will increase milk volume by up to 267% without reducing milk quality within 14 days. Another study mentions that the use of domperidone at a dose of 60mg/day for 14 days increases milk volume by 367%, while at a dose of 30mg/day it increases milk volume by 215%. Another study suggests that the use of katuk leaves can increase milk volume. To date, these have been divided into two types, namely chemical and herbal medicines (Özalkaya et al., 2018).

Chemical drugs used to increase milk production include metoclopramide, domperidone, sulpiride, chlorpromazine, growth hormone, thyrotropin-releasing hormone, and oxytocin. Metoclopramide, sulpiride, and chlorpromazine are being phased out due to their extrapyramidal side effects, which are disorders of the extrapyramidal system in the brain that cause patients to perform involuntary or uncontrollable movements. Meanwhile, growth hormone, thyrotropin-releasing hormone, and oxytocin still require further research (Sari et al., 2017).

The use of herbal galactagogues in treating low milk production, for example fenugreek (Trigonella foenum-graecum), turi leaves, fennel, torbangun (Colanus amboinicus Lour), katuk leaves, and moringa leaves. The use of herbal galactagogues still requires further research to ensure that these ingredients are effective as breast milk stimulants and safe for consumption (Özalkaya et al., 2018). The effectiveness of galactagogues is also important to consider. Several studies related to the use of domperidone as a milk booster will increase milk volume by up to 267% without reducing milk quality in 14 days. Another study states that the use of domperidone at a dose of 60mg/day for 14 days increases milk volume by 367%, while at a dose of 30mg/day it increases milk volume by 215%. Another study suggests that the use of katuk leaves can increase milk volume by up to 50.47% without reducing milk quality within 12 days (Hesti et al., 2017).

Galaktogog adalah substansi yang dapat meningkatkan produksi ASI, termasuk diantaranya makanan, herbal serta obat-obatan sintetik. Obat-obatan galaktogog sintetik diketahui telah memiliki efek samping jika dikonsumsi dalam jangka panjang. Alternatif yang relatif aman digunakan dalam menangani produksi ASI yang kurang lancar adalah dengan mengkonsumsi herbal yang mengandung galaktogog. (Triandini et al., 2025)According to Sim's (2013) research in Australia, 60.4% of women consume herbal medicine while breastfeeding, and 1 in 4 of them use it as a galactagogue. Meanwhile, a preliminary study conducted in Domas village, Pontang subdistrict, Serang district, found that of 7 breastfeeding mothers who experienced low milk production, 4 mothers used galactagogues to treat the problem. Based on data on the number of infants who did not receive exclusive breastfeeding in 2017 in Serang Regency, which was 1,025 infants, the percentage of exclusive breastfeeding still fluctuates, and breast milk is important for infant health. Therefore, this research is important because in addressing the problem of low milk production, appropriate and prompt treatment is needed, taking into account the side effects that may occur, and there has been no similar research conducted in the Banten region. This study is expected to serve as a basis for selecting medications, either for self-medication or for prescription by doctors, and to minimize or prevent the side effects of medications on low milk production in nursing mothers, thereby reducing the losses incurred (Ningsih, Sakinah, et al., 2023). Based on the above description, the author is interested in conducting research with the title “Reflections on the Use of Galactagogues (Both Chemical and Herbal) in Increasing Breast Milk Production in the Pontang Community Health Center Working Area.”

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Methods

The research method used was experiment. This research was conducted in the Pontang Community Health Center Working Area. This research will be conducted from January to March 2024. The study population consisted of breastfeeding mothers in the working area of the Pontang Community Health Center. Based on this, the sample in this study consisted of 35 breastfeeding mothers. The sampling technique used in this study was total sampling. The data collection technique used in this study was primary data obtained directly by the researcher through questionnaires filled out by respondents, and secondary data obtained from several sources such as books, journals, Community Health Center data, and the Banten Provincial Health Office. The tool used was a questionnaire that had undergone validity and reliability testing. Data analysis using univariate and bivariate analysis with paired sample T-test. The research procedure involved requesting a research recommendation letter from the educational institution of Faletehan University in Serang, Banten, requesting permission from the head of the Pontang Community Health Center to collect primary data, gathering data from medical records, and, after obtaining permission, collecting data according to the variables needed to describe galactagogues.

Results

1. Univariate Analysis

   Average breast milk production in nursing mothers who consume chemical and herbal galactagogues

   Table 1. Average breast milk production in nursing mothers who consume chemical and herbal galactagogues

Group	n	Mean	Min	Max
Kimia				
PretestPostest	16	77	68	85
	16	101	90	112
Herbal				
Pretest Posttest	16	78	67	85
	16	113	106	118

   Based on the table above, it shows that in the chemical intervention group, during the pretest, the average breast milk production was 77 ml with a minimum of 68 ml and a maximum of 85 ml. Meanwhile, during the posttest, there was an increase in the average breast milk production to 101 ml with a minimum of 90 ml and a maximum of 112 ml. In the herbal intervention group, the pretest showed an average of 78 ml, with a minimum of 67 ml and a maximum of 85 ml. Meanwhile, during the posttest, there was an increase in the average to 113 ml, with a minimum of 106 ml and a maximum of 118 ml.

2. Bivariate Analysis

   a. The Effect of the Effectiveness of Reflection on the Use of Galactagogues to Increase Breast Milk Production

      Table 2. The Effect of the Effectiveness of Reflection on the Use of Galactagogues to Increase Breast Milk Production

Group	Mean	*Standardeviasi*	*P-Value*
Intervension Kimia	101	5.416	0.000
Intervension Herbal	113	3.462	0.000

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Based on the table above, a P-value of 0.000 (p<0.05) was obtained. Therefore, it can be concluded that there is an effect between the use of galactagogues on increasing milk production in the chemical intervention group and the herbal intervention group.

b. Reflections on the differences in the effectiveness of chemical and herbal galactagogues in increasing milk production

Table 3. Differences in the Reflection of the Effectiveness of Chemical Galactagogue Use Compared to Herbal Galactagogue Use in Increasing Breast Milk Production

Test	T	Df	*p-value*	*Mean-different*
Pretest	0,642	30	0,526	1,438
Posttest	7,585	30	0,000	12,188

Based on the table above, the results of the analysis using the paired sample t-test show that the difference in mean between the chemical intervention group and the herbal intervention group is much greater than the average breast milk production in the chemical group.

Based on the table above, it is known that the p-value of the pretest is 0.526 (p-value > 0.05). This means that there is no difference between the chemical and herbal groups. Meanwhile, the posttest results show a p-value of 0.000 (p-value < 0.05). This means that there is a difference between the chemical and herbal groups. The results of the analysis using the paired sample T-test show that the mean difference between the chemical intervention group and the herbal intervention group is 12.18, which means that the average milk production in the herbal group is much greater than the average milk production in the chemical group.

Discussion

1. Average breast milk production in nursing mothers who consume chemical galactagogues with herbs

Other foods or beverages. The importance of breastfeeding, especially exclusive breastfeeding, for babies is extraordinary. For infants, exclusive breastfeeding is the most nutritionally appropriate food for their needs, protecting them from various diseases such as diarrhea and acute respiratory infections (Fabio et al., 2025). Understanding breast milk production, the lactation or breastfeeding process After giving birth, lactation is controlled by two types of reflexes (The et al., 2023). The milk production reflex. When the baby sucks on the nipple, a hormone called prolactin is produced, which regulates the cells in the alveoli to produce milk. The milk is collected in the milk ducts. Second, the let-down reflex (Zikrina et al., 2022). The normal frequency of breastfeeding is ideally 8-12 times in 24 hours, and 10 to 20 minutes for each breast, with the interval between feedings being between one and a half to two hours. However, there are often longer intervals, possibly up to half an hour. This is not a problem (Ningsih & Rohmah, 2021).

This situation depends on the baby's sucking strength, swallowing speed, and comfort during breastfeeding. When the baby is full, they will release the nipple. The frequency of breastfeeding also depends on the amount of breast milk and the baby's appetite. Recent studies show that babies who breastfeed slowly get the same amount of breast milk as babies who breastfeed quickly. If a mother whose baby breastfeeds slowly stops breastfeeding before the baby is finished, the baby may not get the energy-rich hindmilk needed to grow well. Babies breastfeed 10-12 times a day. The average milk production is 800 mL/day. One hundred milliliters of milk contains 60-65 calories. Milk production per feeding is 90-120 mL/feeding, produced by both breasts. In general, babies will feed 75 mL from the first breast and continue with 50 mL from the second breast (Tamar & Rini, 2022).

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Signs that a baby is getting enough breast milk include urinating at least 6 times in 24 hours, urine that is usually not bright yellow, frequent bowel movements that are yellowish and seedy, the baby appears satisfied and sleeps well, the baby breastfeeds approximately 10 times in 24 hours, the mother's breasts feel soft after breastfeeding, the mother can feel tingling due to the flow of breast milk when the baby is breastfeeding, the mother can hear the soft sound of swallowing when the baby swallows breast milk, and the baby gains weight (Lestari et al., 2021).

Based on the research results showing the mean value in the pretest of the chemical group (77 ml) while the mean pretest of the herbal intervention group was (78 ml). Based on these results, the researcher's assumption is that there is insufficient breast milk production because the average breast milk production does not reach the ideal limit, while the average production is 800 ml per day and each breastfeeding session produces 90-120 ml from both breasts.

2. The Effect of Chemical Galactagogues with Herbs

Statistical test results show that there is an effect between the use of chemical galactagogues and herbal galactagogues on increasing breast milk production. The results of the analysis in Table 5.2 show a p-value=0.000 ($p<0.05$), which means that there is a significant effect between the administration of chemical galactagogues and herbal galactagogues on increasing breast milk production in nursing mothers at the Pontang Community Health Center.

Domperidone is a drug that helps facilitate peristaltic movement and gastric emptying through a dopamine D2 receptor blocking mechanism in the gastrointestinal tract and various central and peripheral nervous systems. Domperidone is a prokinetic agent used as second-line therapy for gastroparesis in patients who do not respond to metoclopramide. In addition, the main side effect of domperidone is prolactinemia, which has the function of stimulating lactation (galactogogue) (Hizriyani, 2021). Wan et al. showed that domperidone 60 mg/day for 14 days increased breast milk volume by 367% compared to a dose of 30 mg/day, which only increased by 215%. However, increasing the dose of domperidone is directly proportional to an increase in side effects. Serum prolactin levels also increased, with the domperidone 30 mg/day group experiencing an increase of 405% and the 60 mg/day dose only slightly higher, at 433%, due to the ceiling effect. In some study subjects, the increase in serum prolactin levels was not always directly proportional to the amount of milk production. The researchers suspect that there are mediators and/or other mechanisms involved in milk production besides serum prolactin.

The results of research by (Biti et al., 2025) state that there is an effect of katuk leaf extract on breast milk production in mothers with babies aged 0-6 months. Therefore, katuk leaf extract can be recommended for mothers who have difficulties breastfeeding. Katuk leaf extract can improve and increase breast milk production in breastfeeding mothers when combined with adequate nutrition and breastfeeding according to the baby's needs.

This study aligns with (Suwanti & Kuswati, 2016), who stated that there is a significant effect of katuk leaf extract consumption on breast milk sufficiency. Efforts to increase breast milk production can be done by consuming katuk leaves daily, especially by adding katuk leaves to meals or taking katuk capsules according to the recommended dosage. Katuk leaves have been known by our ancestors as a vegetable that promotes breast milk production. The physiological activity of katuk leaf extract has antioxidant properties in the human body because it can inhibit hydroxyl free radicals.

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According to the researchers' assumptions, there is an effect of katuk leaf extract administration on breast milk production adequacy in postpartum mothers. Postpartum mothers who were given katuk extract experienced a significant increase in breast milk volume. This study has limitations in that it used ready-made katuk extract; it is recommended that future researchers make their own katuk extract. It is stated that the administration of katuk leaves is proven to be effective in increasing breast milk production in nursing mothers. This is because katuk contains alkaloids and sterols that can increase breast milk flow. In addition, katuk leaves contain vitamins A, B1, C, tannins, and alkaloid saponins. Lactaboost (katuk leaf extract) is a herbal product containing Sauropus androgynus (katuk leaf) extract as its active ingredient. This herbal medicine has traditional benefits as a supplement to help stimulate breast milk production in nursing mothers. The dosage is 1-3 times a day. It has side effects, namely diarrhea, bloating, stomach cramps, and allergies.

A more specific mechanism related to the potential activity of katuk leaves in increasing breast milk production. (Permatasari & Indrawati, 2022) conducted research on the mechanism of katuk leaf extract in increasing breast milk production when administered. The observed effect was the induction of prolactin and oxytocin. The papaverine content in katuk leaves can induce prolactin and oxytocin. As a note, papaverine is not found in significant amounts in katuk leaves.

Domperidone is a drug that is useful for increasing breast milk production. The recommended dosage is 1x1-3x1 domperidone, but it cannot be consumed by people with heart disease. This medication has side effects such as headaches, drowsiness, and even serious effects such as heart palpitations. If this medication causes side effects after consumption, it is recommended to stop taking it and take medication according to the symptoms. Domperidone works by inhibiting the dopamine-mediated inhibition of prolactin secretion in the anterior pituitary gland, resulting in increased serum prolactin levels. This increase in prolactin leads to increased milk production. Therefore, domperidone has become popular as a galactagogue to increase milk production.

Differences in the effectiveness of chemical galactagogues and herbs in increasing breast milk production

The statistical test results show that the p-value of the pretest is 0.526 (p-value >0.05). This means that there is no difference between the chemical and herbal groups. Meanwhile, the posttest results show a p-value of 0.000 (p-value < 0.05). This means that there was a difference between the chemical and herbal groups. The results of the analysis using the paired sample T-test showed that the mean difference between the chemical intervention group and the herbal intervention group was 12.18, which means that the average breast milk production in the herbal group was much greater than the average breast milk production in the chemical group.

Domperidone is a drug that helps facilitate peristaltic movement and gastric emptying through the mechanism of dopamine D2 receptor inhibition in the gastrointestinal tract and various central and peripheral nervous systems. Domperidone is a prokinetic agent used as second-line therapy for gastroparesis in patients who do not respond to metoclopramide. In addition, the main side effect of domperidone is prolactinemia, which has the function of stimulating lactation (galactogogue) (William & Carrey., 2016) showed that domperidone 60 mg/day for 14 days increased breast milk volume by 367% compared to a dose of 30 mg/day, which only increased by 215%. However, increasing the dose of domperidone is directly proportional to an increase in side effects. Serum prolactin levels also increased, with the domperidone 30 mg/day group

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experiencing an increase of 405% and the 60 mg/day dose only slightly higher, at 433%, due to the ceiling effect. In some study subjects, the increase in serum prolactin levels was not always directly proportional to the amount of milk production. The researchers suspect that there are mediators and/or other mechanisms involved in milk production besides serum prolactin.

The results of research by (Fatimah et al., 2022) state that there is an effect of katuk leaf extract on breast milk production in mothers with babies aged 0-6 months. Therefore, katuk leaf extract can be recommended for mothers who have difficulties breastfeeding. Katuk leaf extract can improve and increase breast milk production in breastfeeding mothers when combined with adequate nutrition and breastfeeding according to the baby's needs.

This study aligns with (Suwanti & Kuswati, 2016), who stated that there is a significant effect of katuk leaf extract consumption on breast milk sufficiency. Efforts to increase breast milk production can be done by consuming katuk leaves daily, especially by adding katuk leaves to meals or taking katuk capsules according to the recommended dosage. Katuk leaves have been known by our ancestors as a vegetable that promotes breast milk production. The physiological activity of katuk leaf extract has antioxidant properties in the human body because it can inhibit hydroxyl free radicals.

Domperidone works by inhibiting the inhibitory effect of dopamine-mediated prolactin secretion in the anterior pituitary gland, resulting in increased serum prolactin levels. This increase in prolactin causes an increase in milk production. Therefore, domperidone has become popularly used as a galactagogue to increase milk production.

A more specific mechanism is related to the potential activity of katuk leaves in increasing milk production. (Biti et al., 2025) conducted research on the mechanism of katuk leaf extract in increasing milk production in women who were given katuk leaf extract. The observed effect was the induction of prolactin and oxytocin. The papaverine content in katuk leaves can induce prolactin and oxytocin. For the record, this papaverine content was not found to be significant in katuk leaves.

According to the researchers' assumptions, there is a difference in breast milk production between breastfeeding mothers given chemical galactagogues and herbal galactagogues, with a difference of 12.18 in increasing breast milk production in breastfeeding mothers. Herbal galactagogues are more effective than chemical galactagogues. Therefore, it is recommended that breastfeeding mothers experiencing low breast milk production use herbal galactagogues.

This study was conducted in the working area of the Pontang Community Health Center in Serang City, Banten Province. The study was conducted from June 20, 2024 to June 27, 2024, on breastfeeding mothers with children aged 0-6 months and used one treatment group. The mothers consumed herbal and chemical breast milk stimulants (Lactabost katuk leaf extract and domperidone), and pre-tests and post-tests were conducted by measuring breast milk by pumping the mothers before breastfeeding or at least 2 hours after breastfeeding, pumping both breasts until empty. The breast milk was then put into breast milk bags to be measured. The purpose of this study was to determine the effect of administering herbal and chemical breast milk production enhancers on increasing breast milk production in the Pontang Community Health Center Working Area in 2024.

After obtaining informed consent and ensuring that the prospective respondents were willing to participate, the researchers began collecting data by conducting a pretest, which involved pumping breast milk to measure milk production on the first day for the

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chemical and herbal experimental groups. Next, each chemical and herbal group was given domperidone 1x1 for 7 days and lactabost (katuk leaf extract) 1x1 for 7 days. Then, on the 7th day, a post-test was conducted to measure again by pumping the mothers and measuring milk production for each chemical and herbal group.

There are several causes of low milk production, including: infrequent breastfeeding, ineffective breastfeeding positions, stress, malnutrition, and certain medical conditions. One of the most common factors is a disruption in the normal functioning of the hormones that mediate milk production. These hormones are prolactin and oxytocin. Both hormones work synergistically in the process of breast milk production and its release from the body so that it can be consumed by the baby. (Tamar & Rini, 2022).

Prolactin is usually produced at night. In addition, when a baby suckles at the mother's breast, sensory stimulation can also occur, causing the anterior pituitary gland to produce prolactin. Prolactin can cause the alveolar secretory cells to produce breast milk. The breast milk produced is then stored in the lactiferous sinuses. Prolactin remains available for approximately 30 minutes, allowing breast milk production to generate sufficient quantities for immediate needs, with some stored for the next feeding session, and so on (Susilawati et al., 2022).

In addition to prolactin, the hormone oxytocin is also affected when a baby suckles at the mother's breast. The sensory stimulation produced causes the posterior pituitary gland to produce oxytocin. Oxytocin stimulates contractions of the muscles surrounding the alveoli, causing milk to be secreted from the lactiferous sinuses and out of the body. As a note, oxytocin is produced more quickly than prolactin, so breast milk is immediately released from storage while waiting for prolactin to induce milk production (Özalkaya et al., 2018).

Conclusion

Based on the results of research and data analysis that has been conducted, it can be concluded that the effect of administering chemical and herbal breast milk boosters in increasing breast milk production in nursing mothers aged 0-6 months in the Pontang Community Health Center working area in 2024 is as follows: In the chemical group, the average breast milk production of nursing mothers aged 0-6 months was 77 ml. after receiving the chemical intervention (domperidone), the average breast milk production increased to 101 ml. In the herbal group, the average breast milk production of breastfeeding mothers aged 0-6 months was 78 ml. After the herbal intervention (lactaboost katuk leaf extract), the average breast milk production increased to 113 ml. There was a significant effect between the use of chemical galactagogues and herbal galactagogues on increasing breast milk production with a p-value of 0.000 (p-value <0.05) Among breastfeeding mothers in the service area of the Pontang Community Health Center, there was a difference in the increase in breast milk production between the chemical intervention group and the herbal intervention group, with a mean difference of 12.18 breastfeeding mothers in the service area of the Pontang Community Health Center in 2024.

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