THE EFFECTIVENESS OF PROVIDING COMPLEMENTARY THERAPY OF TURMERIC AND KENCUR HERBAL MEDICINE TO POSTPARTUM MOTHERS TO INCREASE BREAST MILK VOLUME IN THE WORKING AREA OF NORTH TAPIN HEALTH CENTER

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ARTICLE INFO

Article history:
Received 07 May 2023
Accepted 13 July 2023

Keywords:
Herbal turmeric, kencur, complementary, postpartum, breast milk volume

ABSTRACT

Background: Giving breast milk to babies is the best method of feeding. Exclusive breastfeeding coverage in Midwife Mandiri Midwife Independent Practice is still below the target; this can be caused by insufficient milk production. Asitri oil is a substance that can increase milk production, which is found in Asitri oil in turmeric and kencur
Objective: Testing the effect of giving Jamu Turmeric and Kencur on increasing the volume of breast milk in postpartum women in the working area of the North Tapin Health Center.
Methods: The type of research used in this study is quasi-experimental research. The sample consisted of 10 people divided into 2 (intervention and control groups). The intervention group was given turmeric and kencur therapy once a day, while the control group did not receive therapy. The analysis bivariate was performed bivariate analysis using a paired t-test.
Results: Bivariate analysis based on age showed that all ten respondents (100%) were in the non-risk age range, namely 22 to 32 years. Based on postpartum days, most respondents from the two groups were on the third day with a total of 5 people, which was a percentage of 50%—tested data normal distribution. The results of the bivariate analysis showed a p-value of 0.000 which means less than an α value of 0.05 so that there was an effect of giving turmeric and kencur herbs on the smoothness of breastfeeding in postpartum mothers in the working area of the North Tapin Health Center.
Conclusion: There was an increase in the volume of breast milk after being given turmeric and kencur herbs as big 120 ml during seven days, and the administration of turmeric and kencur herbs was effective in increasing the volume of breast milk in postpartum women in the working area of the Tapin Utara Health Center, Tapin Regency.

Introduction

Mother's Milk (MM) is the best food for babies compared to formula or other milk. However, some breastfeeding mothers do not expel milk smoothly or are hampered. This is due to hormonal factors, food intake (Friscila et al., 2022; Suyanti & Anggraeni, 2020). MM has many benefits for the health of infants, namely reducing child mortality caused by diarrhea, reducing acute respiratory infections and other infectious diseases. So based on the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF), it is recommended that children be given only MM for at least six months and continue until the child is two years old based on scientific evidence about the benefits of good breastfeeding. for babies, mothers, families and countries (Destri et al., 2021; Wulandari, 2020).

The State of Indonesia has Laws and Government Regulations that regulate exclusive breastfeeding to increase exclusive breastfeeding in Indonesia. Breastfeeding is regulated in the Government Regulation of the Republic of Indonesia number 33 of 2012 concerning exclusive breastfeeding. Article 6 emphasizes that every mother who gives birth must provide exclusive breastfeeding to the baby she is born with. It can be concluded that according to Government Regulation Number 33 of 2012 Article 6, the target for exclusive breastfeeding in Indonesia is 100%. It does not just end there; Law of the Republic of Indonesia Number 36 of 2009 concerning Health article 128 paragraph 1 which reads: Every baby has the right to receive exclusive mother's milk since birth for 6 (six) months, except for medical indications. Furthermore, services that support exclusive breastfeeding are also listed in the government regulation of the Republic of Indonesia Number 61 of 2014 concerning reproductive health article 17, paragraph 1. Exclusive breastfeeding is also included in specific interventions in activities or actions to succeed in the government's First 1000 Days of Life program, which prioritizes improving Indonesian nutrition (Kemenkes RI, 2012).

Giving MM 6 months after birth without complementary foods or formula milk is the best method because breast milk contains optimal nutrients, both in quality and quantity, that can meet babies' nutritional value and fluids six months after birth (Peli et al., 2020). Several factors can influence MM production. The main factors are hormonal factors, namely the hormones prolactin and oxytocin. The less-than-optimal rate of exclusive breastfeeding can be caused by the low amount of MM produced. This is supported by data obtained by the Health Research and Development Agency in Indonesia in 2010 which stated that the lack of milk production was caused by insufficient breast care (46%), frequency of breastfeeding less than eight times/day (25%), body weight Low birth weight (LBW) (14%), premature (5%), and chronic or acute disease (5%). Efforts to facilitate breastfeeding are carried out by caring for the breasts, drinking more water, doing oxytocin massages, and consuming traditional medicinal ingredients using ingredients around us, such as herbs (Baequny & Hidayati, 2016).

Jamu is a type of traditional medicine in Indonesia whose recipes have been passed down from generation to generation by their ancestors. The community also considers herbal medicine as a safer treatment than modern medicine. People consume more herbal medicine during the puerperium and lactation than during pregnancy and childbirth. The community does this because they believe that the medicine can facilitate the production of breast milk and prevent disease, maintain body resistance and maintain the beauty of the mother, especially in the female organs. (Safari & Sinaga, 2022). Ingredients for herbal medicine are usually made from plants, such as roots, leaves, flowers, and tree bark. Herbal medicine made from roots includes turmeric, kencur, ginger, galangal, temulawak, etc. Herbal medicine is usually processed by boiling, taking the water, and then drinking it (Kumalasari et al., 2014).

Herbal medicine, often used by the community to increase MM production, is made from turmeric and kencur. The processing method varies greatly between herbal makers but is not much different between watch sellers. The composition of the herbal medicine is turmeric because it helps reduce inflammation, reduce fever, expedite the respiratory system, reduce pain during menstruation, prevent hypertension, promote MM production, and increase appetite (Prastiwi, 2018).

Breastfeeding women may experience tiredness and disrupted sleep schedules and be tempted to turn to energy drinks or herbal medicinal herbs that are popularly used to reduce fatigue. However, nursing mothers can safely consume herbal drinks and plant herbs in moderation. Energy drinks contain less-studied herbal ingredients and are not clearly disclosed on product labels. The ingredients in energy mixes vary by manufacturer; the number of ingredients and serving sizes also vary. Excessive consumption of energy drinks has the potential to cause adverse effects due

to their high vitamin content and stimulant-containing ingredients. Like other herbal medicines, herbals can have side effects when consumed in large quantities. Especially herbal medicine that has been packaged because there is a mixture of other ingredients (Hidayat & Napitupulu, 2015).

According to Basic Health Research Data (RISKESDAS) 2021, babies aged less than six months who receive exclusive breastfeeding in Indonesia are 52.5% or only 2.3 million babies, a decrease of 12% from the 2019 figure. Meanwhile, the Early Breastfeeding Initiation Rate (IMD) decreased from 58.2% in 2019 to 48.6% in 2021. In South Kalimantan, the coverage of exclusive breastfeeding in 2019 was 65.97%, decreased in 2020 by 60.55 and in 2021 it became 50, 16%, every year there has been a decrease in babies who get exclusive breastfeeding (Kemenkes RI, 2022).

Tapin Regency is one of the districts in South Kalimantan which has a total of 1,491 babies 0-6 months and 980 people, or 65.97%, who get exclusive breastfeeding (Dinkes Provinsi Kalimantan Selatan, 2021). Data obtained from the Tapin District Health Office in 2022 shows that the coverage of exclusive breastfeeding until November 2022 is 80.18%, while North Tapin District is the lowest three coverage of exclusive breastfeeding with a percentage of 67.80%.

Based on the results of a survey conducted by researchers on ten breastfeeding mothers in the working area of the Tapin Utara Health Center, there were 7 (70%) mothers said their milk production was not smooth because the milk only came out on the second or fifth day after delivery, the baby continued to cry, so the mother or families apart from giving breast milk are also given formula milk as an alternative problem solver. This failed to provide exclusive breastfeeding, which resulted in the coverage of exclusive breastfeeding not being achieved. One effort to increase breast milk production is to improve the quality of food and drink that can stimulate milk production, such as food and drink made from ingredients such as katuk leaves, papaya, turmeric, kencur, and others which contain nutrients such as phosphorus, iron, calcium, vitamins, essential oils (Suyanti & Anggraeni, 2020). Therefore, mothers who give birth choose to consume herbal medicine containing these ingredients, believing that by consuming traditional herbal medicine, mothers will feel breast milk smoothly. Their bodies will feel comfortable when breastfeeding. This study aims to determine the effectiveness of giving turmeric and kencur herbal medicine to postpartum mothers to increase the volume of breast milk in the Working Area of North Tapin Health Center, Tapin Regency.

Methods

The population in this study were postpartum mothers who breastfed their babies in the working area of the North Tapin Public Health Center starting from the date the study was approved. The sample in this study was ten postpartum mothers, namely five people who received the intervention and five people as the control group. Sampling in this study used a minimum sample because of the uncertain number of respondents and based on the minimum research requirements for experimental research samples. Sampling in this study was carried out using a purposive sampling technique, which is one of the non-random sampling techniques in which the researcher determines sampling by determining specific characteristics that are by the research objectives so that they are expected to be able to answer research problems.

The research instruments used in this study were Jamu Turmeric and Kencur, pumping equipment, breast milk storage bottles, and observation sheets in the form of checklists. Data analysis was done using a paired sample t-test, namely bivariate analysis. Previously, the paired sample t-test must meet the requirements: the data is normally/symmetrically distributed, the two data groups are independent, and the variables associated are numerical and categorical (Hidayat, 2015).

Results

The research results on the volume of breast milk without and with the intervention are presented in Table 1. The results of the bivariate analysis of the intervention and control groups are presented in Table 2.

Table 1. Mother's milk volume in control, and turmeric and kencur therapy for seven days

Days	Control group	Intervention group
1	18.5	30.5
2	30	50
3	30	65
4	40	78
5	47	98
6	50	100
7	57	180

Table 2. Bivariate analysis of the effect of turmeric and kencur therapy on postpartum mothers in increasing milk production

Paired Samples Correlations*				
		N	Correlation	Sig.
Pair 1	Pre & Post	10	0.897	0.000

* Data is normally distributed.

Discussion

The results showed that the respondent experienced an increase in MM volume for seven days; all respondents experienced a significant increase. The results of the bivariate analysis on the variable p-value were 0.000 (< α 0.05), which meant that Ho was rejected and Ha was accepted so that it was concluded that there was an effect of giving turmeric and kencur herbs on the smoothness of breastfeeding in postpartum mothers in the working area of the North Tapin Health Center. These results identified that giving turmeric and kencur herbs could help increase the volume of breast milk in postpartum women after being given turmeric and kencur herbs, which were carried out for seven days with a frequency of giving once a day.

This is also supported by research conducted by Setyaningsih (2018), which found a significant relationship between consuming traditional herbal medicine once a day for a week and the smoothness of breastfeeding. Moreover, Kumalasari's research (2018) found that postpartum mothers who usually drink herbal medicine have a four times greater chance of smooth milk production.

According to Dwi Sunar (2009), the volume of breast milk produced is influenced by the postpartum mother's psychological condition and the food consumed. Therefore, mothers should not feel stressed or anxious and consume lots of nutrition during postpartum and breastfeeding. The postpartum period is a period of recovery for the female reproductive organs, which are very susceptible to disturbances in their reproductive organs (Yusari, 2016). The postpartum period in each region has beliefs regarding various herbs or medicinal ingredients that can be used during the postpartum period. Generally, medicinal ingredients consist of ingredients mixed from various plants, such as leaves, roots, or other ingredients, which are believed to have efficacious in strengthening the body (Sari et al., 2017).

Traditional herbal medicine is an inheritance from our ancestors in the form of traditional herbs used by the community to maintain a healthy body (Setyaningsih et al., 2018). Consumption of herbal medicine is more common during the puerperium than during pregnancy and childbirth. Most people consume herbal medicine to help breast milk flow, prevent disease, maintain body resistance and maintain the mother's beauty, especially in the female organs. Jamu is an easier and more economical ingredient. In addition, herbal medicine can reduce anxiety or tension in postpartum mothers (Prastiwi, 2018).

Respondents' level of awareness causes the link between actions and health conditions regarding the importance of consuming traditional herbal medicine to obtain good health after giving birth. In addition, the respondent's actions determine the respondent's habits in maintaining his daily health. The more positive the respondent's actions in maintaining their health, the better their health condition (Pakpahan et al., 2021).

Based on Setyaningsih's research (2018), it was found that kencur (Kaemferia galanga L.) is helpful as a refresher and body warmer, thereby affecting the condition of mothers for breastfeeding and turmeric (*Curcuma domestica* Val.) contains lots of curcumin, carbohydrates, protein, vitamin c, potassium, phosphorus, Fe and fat which help meet the nutritional needs of mothers to support milk production (Setyaningsih et al., 2018).

Giving turmeric aims to increase the mother’s stamina after giving birth. Based on Baequny’s research (2016) results, drinking herbal medicine containing turmeric has a four times greater chance of smooth milk production than postpartum mothers who do not drink it (Baequny & Hidayati, 2016).

Turmeric or *Curcuma domestica* has the benefit of being a rheumatic pain reliever. Side effects; mild in nature, namely dry mouth, bloating, and abdominal pain; high doses cause nausea and skin allergies. Interaction: with blood-thinning drugs increases the risk of bleeding. Combination with piperine and green tea enhances the effects of turmeric (Sumarni & Anasari, 2019).

Saptaningrum researchers found that giving kencur rice affected the smooth production of breast milk in postpartum mothers (0-7 days) in Blora Regency. The provision of buffoonery and kencur rice both affect the smoothness of breastfeeding for postpartum mothers (0-7 days) in Blora Regency, but seen from the mean value (average), the most dominant influence on the smoothness of milk production (Saptaningrum et al., 2022).

Traditional herbal medicine can facilitate breast milk release by indirectly stimulating the prolactin hormone as a mechanism for a lactagogum compound (a stimulant for milk production) containing protein, minerals, and vitamins. The protein component is efficacious in stimulating increased milk secretion, while the steroids and 13 vitamin A play a role in stimulating new alveolar epithelial proliferation, thereby increasing the alveoli.

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