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### Potential Combination Massage Oketani Esensial Oil Fennel and Self Hypnosis AS Alternatives Midwife Services To Increase Breast Milk Production In Post Partum Mothers

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#### ABSTRACT

##### Background

Exclusive breastfeeding coverage has increased in the first two weeks of the puerperium as much as 38% of breastfeeding mothers experience problems with milk production that has not been smooth so that mothers feel that breast milk production is not enough and is the main reason for early cessation of breastfeeding so that a combination method of giving oketani is needed. Fennel essential oil massage and self-hypnosis.

##### Objective

To prove the effectiveness of the combination of oketani massage essential oil fennel and self hypnosis as an alternative to midwifery services to increase breast milk production for post partum mothers.

##### Methods

The sampling technique used simple random sampling to obtain 45 normal postpartum mothers consisting of 3 groups, namely the combination intervention group, the self-hypnosis group and the breast care control group.

##### Results

The intervention in each group had an effect on increasing breast milk production with a p-value of 0.001. However, in the intervention group, the combination of oketani massage, essential oil, fennel and self hypnosis had an average increase in milk production that was higher than the administration of self hypnosis and breast care.

##### Conclusion

The potential of giving a combination of oketani massage essential oil fennel and self hypnosis has an effective application in midwifery services to increase milk production in normal postpartum mothers.

**Keywords:** Oketani Massage, Fennel Essential Oil, Self Hypnosis, Breast Milk Production

## INTRODUCTION

Mother's milk (ASI) is the main nutrient that plays an important role in health and survival and can reduce infant morbidity and mortality because it contains various substances needed in the process of growth, infant development, infant health and immunity. Exclusive breastfeeding is breastfeeding until the age of the first 6 months without additional liquid or solid food except drugs and vitamins and continues until the child is 2 years old or older and continues with adequate, safe, and age-appropriate nutrition.<sup>1-3</sup>

According to data from the World Health Organization (WHO) in 2019, breastfeeding worldwide only reached 40.93%, while the coverage according to world data was 50%. Only a few mothers can exclusively breastfeed in the first 6 months, this is said by the American Academy of Pediatrics and the World Health Organization, 10-15% of mothers cannot produce breast milk. Exclusive breastfeeding coverage in Indonesia in 2019 was 67.74%. This figure has exceeded the 2019 Strategic Plan target, which is 50% in the data, South Kalimantan is included in the 16 provinces in Indonesia which achieved the 2019 strategic plan target of 68.02%. The Banjar Regency area has reached 65.7% coverage in 2019.<sup>4,5</sup>

The low coverage of exclusive breastfeeding is considered to play an important role in more than one million child deaths every year as well as the occurrence of disability in children experienced since they were babies. Exclusive breastfeeding has been shown to be effective in preventing the death of children under the age of 5 years by 13-15%. In fact, recent studies have shown that babies who are not breastfed for a long time can increase the risk of infection and are twice as large as babies who are breastfed. This is due to the absence of antibodies that protect the baby's body from disease.<sup>6-8</sup>

Failure in the breastfeeding process is influenced by many factors, namely physical, psychological, social, economic and cultural factors as well as environmental factors. about 30% of women experience at least one problem during the breastfeeding process in the first two weeks of the puerperium.<sup>9</sup>

Efforts to overcome the problem of breast milk production can be given with non-pharmacological therapy which has many advantages such as easy to implement, practical, affordable and can also reduce the presence of side effects that can be detrimental. One

of the holistic therapies that can be used to increase breast milk production is giving with the massage method, a practical and simple method because the massage method gently stimulates the surface of the skin, relaxing the muscles, ligaments, tendons and fascia so that this process creates a sense of relaxation. to facilitate the flow of nerves to the milk ducts in both mother's breasts.<sup>10,11</sup> Fennel essential oil (*Foeniculum Vulgare* Mill) can also be known as fennel oil which contains flavonoids, minerals, fatty acids, vitamins and contains essential oils.<sup>12,13</sup> and the provision of hypnotherapy relaxation in order to build positive intentions, motivate and maximize the breastfeeding process.<sup>14</sup> By controlling the subconscious energy so that it can reduce physical discomfort and can improve the mood of the mother during the breastfeeding process because when the mother feels relaxed she does not realize it directly stimulates the hormone prolactin.<sup>15</sup>

## METHODS

This type of research uses true experiments with a randomized pre-test and post-test with control group design. The population in this study is postpartum mothers with normal delivery criteria, postpartum day 1, mothers who have babies with baby weight 2500-4000 grams. The sample in this study amounted to 45 people who had been determined according to the inclusion and exclusion criteria using simple random sampling method. The sample is divided into 3 groups namely the combination group oketani massage essential oil fennel and self hypnosis for the intervention group II, self hypnosis for the intervention group I, and breast care for the control group which was given on the first day of the mother's puerperium, before that the researcher would conduct a pre test and then provide an intervention and make observations repeated after the intervention was given and the 6th post-test was repeated.

Data analysis used one way ANOVA test, post hoc bonferori, paired samples T-Test and general linear repeated measure ANOVA and post hoc bonferori. with a significant level at  $p < 0.05$ .

## RESULTS

### Bivariate Analysis

Based on table 1, it states that the average difference in baby weight before and after treatment in

the control group (breast care) is 107.9 grams, in the intervention group 1 (self hypnosis) is 136.4 while in the intervention group 2 (combination) 216.0 grams.

/day with a statistical p-value <0.05, which means there is a difference before and after being given treatment.

**Table 1: Analysis of the Effect of Intervention on Increasing Breast Milk Production with Baby Weight Indicators**

| Baby weight | Control Group<br>(breast care) | Intervention Group 1<br>(self hypnosis) | Intervention Group 2<br>(combination) | p Value |
|-------------|--------------------------------|---|---------------------------------------|---------|
|             | Mean±SD                        | Mean±SD                                 | Mean±SD                               |         |
| Pre Test    | 3166.6±407.3                   | 3053,3±458.0                            | 3280.0±348.8                          | 0.320   |
| Post Test   | 3274.6±417.2                   | 3189,8±438,7                            | 3496.0 ±344.2                         | 0.111   |
| p Value     | 0.001                          | 0.001                                   | 0.001                                 |         |
| <b>Δ</b>    | 107.9±74.4                     | 136.4±66.0                              | 216.0±24.5                            | 0.001   |

*\*one way anova\*Paired simple t-test*

Table 2 states that the combination of oketani massage essential oil fennel and self-hypnosis is better than the self-hypnosis group with p=0.002 and the breast care group 0.001 however, the breast care group is not better than the self-hypnosis treatment with p=0.582. And it is also seen from the average difference in treatment that the combination of oketani massage essential oil fennel is more effective and has the potential to be given to increase breast milk production.

**Table 2: Post Hoc Analysis of Infant Baby weight Between Groups**

|                              | Mean Difference | P-value |
|------------------------------|-----------------|---------|
| Combination vs self hypnosis | 79.533          | 0.002   |
| Combination vs Breast care   | 108.06          | 0.001   |
| Self hypnosis vs breast care | 28,533          | 0.582   |

*\* post hoc Bonferroni*

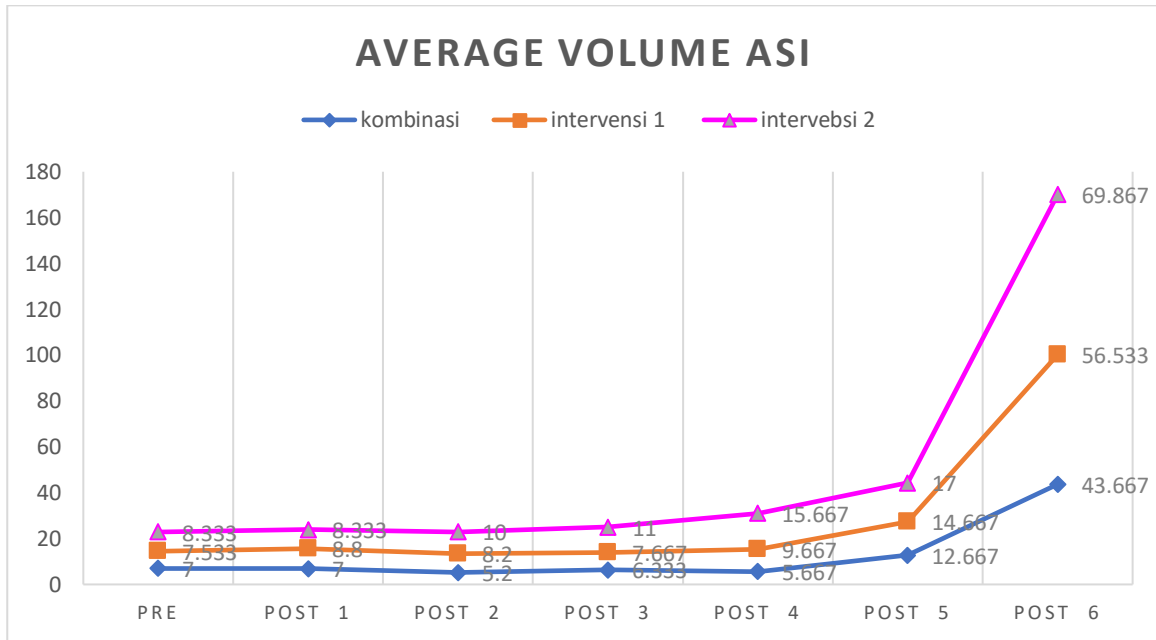
Based on table 3 states that there is a significant difference between the treatment of giving breast care, self hypnosis treatment, and combination treatment with p value = 0.001.

**Table 3. Analysis of Repeated Measure ANOVA (Test Of Between-Subjects Effect) Test Results on Breast Milk Volume Between the Three Groups**

| Source      | Type III Of Squares | df | Mean Square | F       | P     |
|-------------|---------------------|----|-------------|---------|-------|
| VOLUME      | 250726.251          | 1  | 250726.251  | 932,835 | 0.001 |
| breast milk |                     |    |             |         |       |

*\*Repeated Measure Anova*

Fig1 shows the difference in the average increase in breast milk volume before and after the intervention was given in each group.



Based on table 4, it is stated that giving a combination of oketani massage essential oil fennel and self hypnosis is better when compared to the breast care group with  $p = 0.001$ , however, the self hypnosis group is not better than the breast care group with  $p = 0.065$ . And also seen from the average difference in the treatment of the combination of oketani massage essential oil fennel is more effective given to increase milk production.

**Table 4. Post Hoc Analysis of Breast Milk Volume Between Groups**

| Dependent variable | Group                        | Mean difference | P     |
|--------------------|------------------------------|-----------------|-------|
| Breastmilk Volume  | Combination vs Self Hypnosis | 4,924           | 0.106 |
|                    | Combination vs Control       | 10,324          | 0.001 |
|                    | Self Hypnosis vs Control     | 5,400           | 0.065 |

\* *post hoc Bonferroni*

## DISCUSSION

Analysis of the Potential for Giving the Combination of Oketani Massage Essential Oil Fennel and Self Hypnosis on Increasing Breast Milk Production for Postpartum Mothers with Baby Weight Indicators. The results showed that the average weight gain of infants was 100-200grams and an increase of 15-40 grams per day in each group. This is in line with the theory that breastfeeding is said to be sufficient if the baby's weight does not decrease by more than 7% of birth weight and there is an increase in the baby's weight in the first week of 100-200 grams/week.<sup>16,17</sup> In this study, the three groups experienced an increase in breast milk production on the baby's weight indicator because the combination intervention group had a large contribution effect where the mother felt more relaxed,

confident in undergoing the postpartum period and breastfeeding and the mother felt relieved after the massage. nipples become more elastic, mothers are also easy to consult directly with therapists or midwives so that they can build trust. Breast milk can affect the baby's weight because breast milk contains lactose, this lactose will be perfectly absorbed by the lactose enzyme found in the baby's digestive tract, then lactose will be converted into glucose and galactose and finally metabolized into energy and calories which can affect the baby's weight.<sup>18,19</sup> The research conducted has an effect size of 1.6 on indicators of infant weight gain. So it can be concluded that the administration of a combination of fennel essential oil massage and self hypnosis has been shown to have a strong effectiveness in increasing breast milk production on indicators of infant weight and the combination of Fennel essential

oil massage and self hypnosis can be used as a potential alternative in midwifery services.

Analysis of the Potential for Giving the Combination of Oketani Massage Essential Oil Fennel and Self Hypnosis on Increasing Breast Milk Production for Postpartum Mothers with Breast Milk Volume Indicators

The results of the research that the three groups experienced an increase in breast milk production on the breast milk volume indicator, with different treatments but there was a similarity in the mechanism of stimulation at the hypothalamus point. The volume of breast milk that is in accordance with the theory of transitional breastfeeding is on day 4 to day 10 with a volume of 100-300 cc of breast milk, but low milk production on the first days after giving birth becomes an obstacle for postpartum mothers in giving breast milk early to their babies. The lack of volume of breast milk in the first days after giving birth can be caused by a lack of stimulation of the hormones prolactin and oxytocin which play a very important role in the process of milk production and expenditure. The research conducted has an effect size value of 1.8 on the breast milk volume indicator so that the combination of fennel essential oil massage and self hypnosis has proven to have a strong effectiveness in increasing breast milk production on the breast milk volume indicator and the combination of fennel essential oil massage and self hypnosis can potential as

an alternative choice in midwifery services.

## CONCLUSION

There was a difference in the increase in indicators of breast milk adequacy in the form of baby weight which increased more in the combination group with a delta value of 216 grams/43 grams/day compared to the self-hypnosis group with a difference of 136grams/27 grams/day and in the breast care group the difference was 107 grams/day. 15 grams/day. This is due to the factor of giving a combination of oketani massage, essential oil, fennel and self hypnosis and the nutritional intake that the mother consumes. Meanwhile, in the provision of self hypnosis and breast care, there are factors that inhibit breast milk production, namely cultural factors.

There was a difference in the increase in the indicator of breast milk adequacy in the form of breast milk volume which increased more in the combination group at posttest 1 to posttest 6 (73 ml/day) compared to the group giving self hypnosis starting at posttest 6 (59 ml/day) and in the group giving breast care at posttest 6 (46 ml/day). This is because the factor of giving a combination of oketani massage essential oil fennel and self hypnosis and the education provided can be well received and carried out. Meanwhile, in the provision of self hypnosis and breast care, there are factors that inhibit breast milk production, namely cultural factors.

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