THE INFLUENCE OF GALBLADDER ACUPRESSURE POINT 21 (JIAN JING) AND STOMACH 18 (RU GEN) IN INCREASING BREASTMILK PRODUCTION

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ABSTRACT

Background: The breast milk is the best food for the babies containing white blood cells, proteins and immune substances which are suitable for them. Various treatments have been applied to increase breast milk, including pharmacological and nonpharmacological methods. Among the nonpharmacological methods are complementary acupressure treatments which include gallbladder 21 (Jian Jing) and stomach 18 (Ru Gen). This study aims to determine the effect of acupressure points gallbladder 21 (Jian Jing) and stomach 18 (Ru Gen) on breast milk production in postpartum period.

Methodology: This study used quasi experimental design with pretest posttest with control group design. The population of this study all postpartum mothers around the researcher’s work area in Ngesrep and Pegandan Health Center, Semarang City in May-June 2017 who met the inclusion criteria. The number of samples are 22 postpartum mothers who are in 3-7 postpartum days. The sampling technique is purposive sampling.

Results: The results showed that the difference of average baby weight as an indicator of breast milk production before and after intervention was 2889 grams to 2776 grams with a difference of 112 grams in the treatment group and 2901 grams to 2683 grams with a difference of 246 grams in the control group. The statistical independence tests showed that there was an effect of acupressure point gallbladder 21 (Jian Jing) and stomach 18 (Ru Gen) on breast milk production in postpartum period (p<0.001).

Conclusion: From the results study, it is expected that acupressure can be socialized and applied among health workers as one of the techniques to facilitate breast milk production in postpartum period.

Keywords: acupressure, gallbladder 21, stomach 18, breast milk, postpartum period

INTRODUCTION

The breast milk is the best food for babies that contains white blood cells, protein and immune substances that are suitable for babies. The breast milk helps optimal growth and development of children and protects against disease [1]. The 1367 million babies born throughout the world, only 32.6% were exclusively breastfed during the first 6 months. In industrialized countries, infants who do not get exclusive breastfeeding have a higher risk of death than those who are exclusively breastfed. In developing countries only 39% of mothers give exclusive breastfeeding [2]. The achievements of Indonesia's Exclusive breast milk in 2012 were at the rate of 48.62% and then experienced an increase in the year, namely 2013 54.3%. In 2014 the achievement of exclusive the breast milk in Indonesia experienced a decrease of 52.3% and in 2015 slightly increased to 55.7% [3].
The percentage of exclusive breastfeeding for infants aged 0-6 months in Central Java in 2015 is 61.6% which means that it has reached the target of the Central Java Strategic Plan which is above 59% [1]. This percentage experienced a slight increase compared to 2014 which was 60.7% [4]. Districts or cities with the highest percentage of exclusive breastfeeding were Cilacap namely 86.3% followed by Purworejo 85% and Temanggung 83.7% and districts or cities with the lowest percentage of exclusive breastfeeding were Semarang, which was 6.72% followed by Kudus 13.1% and Tegal 33.4%. The number of exclusive breastfeeding obtained by Semarang City in 2015 has decreased dramatically compared to 2014 which was 47.9% [1]. Ngesrep Health Center experienced a fluctuating rate of exclusive breast milk coverage throughout 2016. In 2016 it was 7.66% which was still below the Semarang City Strategic Plan target of 55% [5].

Research from Harvard University shows that children who are given breast milk has better language skills when they are 3 years old. Children with breast milk also have a high IQ score at the age of 7 years [6]. Immune substances found in breast milk will protect babies from diarrheal diseases and reduce the chances of babies getting ear infections, coughs, colds and allergic diseases [3]. Efforts to support the increase in exclusive breastfeeding can be seen from various global and national acknowledgments or agreements aimed at protecting, promoting, and supporting breastfeeding. Thus, it is expected that every mother in the whole world can carry out breastfeeding and every baby in the whole world gets the right to get breast milk.

Various treatments have been applied to increase breast milk on postpartum mothers in postpartum period. Postpartum period is a period of recovery, from labor to completion until the uterine organs return to their pre-pregnancy state, the duration of the postpartum period is 6-8 weeks. There are pharmacological and non-pharmacological method. Among non-pharmacological methods are complementary treatments including acupuncture and acupressure [7]. The benefits of the acupressure itself are relatively low cost, easy to learn and non-invasive [8].

Acupressure is a therapy that uses fingers by providing massage or stimulation at points in the body to reduce or treat diseases. In our body there are acupressure points for the heart, lungs, kidneys, eyes, liver, thyroid, pancreas, sinuses and brain. The technique for acupressure therapy is the first thing to consider before doing an acupressure massage is the general need of people who will do the massage. Acupressure is not possible for people who are hungry or too full, and for women who are pregnant. In addition to the patient's condition, space for acupressure also needs to be considered, namely the room temperature does not need to be hot and not too cold, good air circulation. Massage can be done after finding the right meridian point, which is causing a reaction at the point of massage in the form of pain, rheumatic pain or aches. In acupressure therapy massage can be done using the fingers (thumb and index finger). The duration and amount of pressure (massage) depends on the type of acupressure [9].

Point gallbladder 21 (Jian Jing) is located in the middle between the back of C7 and the end of the acromion (shoulder) at the highest point of the muscle Trapezius. The quality of gallbladder 21 is relaxing and relaxing. Stimulation is a pressing motion with the thumb or the tip of the elbow (Down near forearms) and the outside with the elbow (neck to shoulder). Gallbladder 21 can stimulate let down reflex and secrete prolactin, this point oxytocin can also trigger uterine contractions and bleeding [10]. Prolactin is one of the basic hormones in the secretion of breast milk and an increase that promotes breastfeeding. Based on traditional Chinese medicine, stimulation of several points in the body can cause balance in blood circulation, hormone secretion and other factors, which increase the predication and secretion of breast milk [11].
Point stomach 18 (Ru Gen) is located lateral to the breast 4 fingers below the nipple, and can improve blood circulation so that it stimulates the alveolus to contract so that the milk is pushed towards the nipple [12].

Figure 1. Point location of gallbladder 21 [11].

Figure 2. Point location of stomach 18 [11].
Gallbladder 21 and Stomach 18 pathway to breast milk production:

- Stimulation (emphasis) uses the thumb on point gallbladder 21 (bile duct).
- Start at the highest point of the trapezius muscle.
- Then, into the outer eye sac down to the anterior aspect of the ear. Then rise to the corner of the forehead to the posterior to the bottom of the ear.
- Towards the brow arches running above the hairline to the lateral side of the neck (the highest point of the trapezius).
- Continue down to the axilla and enter the chest.
- Then it appears on the lateral side of the lower abdomen near the femoral artery in the inguinal region running across to the pelvic region.
- Blood circulation balance and hormone secretion.
- Secreting prolactin and oxytocin.
- Let down reflex.

Stimulation (emphasis) uses the thumb on point stomach 18 (gastric tract).
- Start on the lateral breast, 4 fingers below the nipple.
- Formation of blood by the spinal sum-sum.
- Absorbed spleen (chi) and stomach (pi we chi) are converted into fundamental substances.
- Promotes blood circulation.
- Stimulating alveolous.
- Milk is pushed towards the nipples.
- Milk production is swift.

Figure 3. Pathway gallbladder 21 and stomach 18 for increase breast milk production [10, 12]

Although accupoint used in acupressure is the same as the points used in acupuncture, due to the non-invasive nature of acupressure, compared to acupuncture, it seems that the application of acupressure to increase milk production is more effective in mothers who disagree on acupuncture [13]. Acupressure can be used as an alternative intervention in treating mothers postpartum [15]. The results of a preliminary study conducted by researchers at the Ngesrep Health Center in Semarang City 8 out of 10 mothers said they had complaints of breastfeeding because their milk production was small especially on the first day of breastfeeding while others said it was due to lack of knowledge about breastfeeding and because of working mothers. While the efforts made by the Ngesrep Health Center to date are programs in the form of health promotion on breastfeeding counseling.

METHODS

Type of research is quasi-experimental with a pretestposttest design with control group. The study population consisted of 27 normal postpartum mothers. The sampling technique was using purposive sampling technique with a sample of normal postpartum 3-7 days which met the inclusion and exclusion criteria in the 24 working areas of the Ngesrep and Pegandan Health Center of Semarang city with a
total drop out of 2 mothers totaling 22 mothers in each - each control group and treatment group. The control group was given normal puerperal care in the form of breastfeeding and treatment group health education with the gallbladder 21 (Jian Jing) and stomach 18 (Ru Gen).

The inclusion criteria in the sampling of this study were normal postpartum 3-7 days, mothers did not abstain from food during the study, postpartum mothers did not use contraception, the breasts did not experience abnormalities such as swelling, abrasions, and inverted nipple shape into), the baby's suction reflex is good, the gestational age at the time of delivery is enough months (38-41 weeks), the postpartum mother does not consume cigarettes or alcohol, the baby is not given formula milk at the time of study, the baby's weight is >2500 grams. The exclusion criteria in taking the study sample were mothers experience complications such as severe preeclampsia, eclampsia, heart abnormalities or other conditions which stated the condition of breast milk was not possible, infants not in health problems such as jaundice, mothers who refused to become research respondents.

On the 3rd day of postpartum mother’s treatment group, birth weight obtained from the mother's checkbook will be recorded then every day in the morning starting on the 3rd day until the 7th day of postpartum. Mothers will be given stimulation gallbladder 21 and stomach 18 with 1 hour duration. On the 7th day the postpartum period of the baby's weight will be weighed using digital baby scales that have been tested in the Meteorological Agency Semarang and have been prepared by researchers as an indication of breast milk production. Stimulation is given for 5 days because according to the theory the baby's weight does not decrease exceed 7% of birth weight in the first week of birth, so that the baby's weight as an indicator to assess the production of mother's milk will be more accurate because the measurement of the baby's weight is done in the first 7 days of birth which is day 3 to 7 (for 5 days). Processing data using the independent t test.

THE RESULTS

Characteristics of the Postpartum Mothers in the Working Area of Pegandan and Ngesrep Health Center

Table 1. Characteristics of the Postpartum Mothers in the Working Area of Pegandan and Ngesrep Health Center.

<table>
<thead>
<tr>
<th>No</th>
<th>Characteristics of respondents</th>
<th>Treatment</th>
<th>Control</th>
<th>p value*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;20 years</td>
<td>1</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>20-35 years</td>
<td>10</td>
<td>90.9</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>&gt; 35 years</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>School / High School</td>
<td>7</td>
<td>36.36</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>D3 (bachelor) / S1 (master degree)</td>
<td>-</td>
<td>63.63</td>
<td>8</td>
</tr>
<tr>
<td>3.</td>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Works</td>
<td>9</td>
<td>81.81</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Not</td>
<td>2</td>
<td>18.18</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Parity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primipara</td>
<td>5</td>
<td>45.45</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Multipara</td>
<td>6</td>
<td>54.54</td>
<td>6</td>
</tr>
</tbody>
</table>

*p value homogeneity using levene test

Based on table 1 it can be seen that the age of postpartum mothers in the treatment group mostly 20-35 years old (90.9%) with the majority of higher education as many as 7 respondents (63.63%). Most of the postpartum mothers were working (81.81%) and most were multiparous (54.54%).
control group it was known that postpartum mothers aged 20-35 years (100%) were highly educated (72.72%). Most of the postpartum mothers were working (72.72%) and most were multiparous (54.54%). From all characteristic data after being tested for homogeneity shows the results of p value >0.05, the characteristic data can be said to be homogeneous or the same and fulfill one of the requirements of the t test.

**Distribution Frequency Breast Milk Treatment and Control Groups**

Table 2. Distribution Frequency Breast Milk Treatment and Control Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Treatment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Milk Production</td>
<td>Good</td>
<td>Less</td>
</tr>
<tr>
<td>F</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>%</td>
<td>100%</td>
<td>27.27%</td>
</tr>
</tbody>
</table>

Based on table 2 it can be seen that all postpartum mothers in the treatment group had good (100%) breast milk production. In the control group, the majority of postpartum mothers had less milk production (72.72%).

**Normality data**

Table 3. Data Normality Test

<table>
<thead>
<tr>
<th>Group</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Before</td>
<td>0.266</td>
</tr>
<tr>
<td>After</td>
<td>0.702</td>
</tr>
<tr>
<td>Difference</td>
<td>0.077</td>
</tr>
<tr>
<td>Control Before</td>
<td>0.214</td>
</tr>
<tr>
<td>After</td>
<td>0.187</td>
</tr>
<tr>
<td>Difference</td>
<td>0.264</td>
</tr>
</tbody>
</table>

Based on the table 3 showed that p value in the treatment group before after and in the control group before after >0.05 which means that all data are normally distributed and can interpreted as representing a population, and can be continue to analyzed by paired t test.

**Average Distribution of Infant Baby Body Weight and Homogenity Test**

Table 4. Average Distribution of Infant Baby Body Weight and Homogenity Test

<table>
<thead>
<tr>
<th>Group</th>
<th>Min</th>
<th>Max</th>
<th>Mean ± SD</th>
<th>*p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Before</td>
<td>2650</td>
<td>3110</td>
<td>2889 ± 168.6</td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>2559</td>
<td>3010</td>
<td>2776 ± 145.5</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>61</td>
<td>190</td>
<td>112.45 ± 42.7</td>
<td></td>
</tr>
<tr>
<td>Control Before</td>
<td>2600</td>
<td>3300</td>
<td>2901 ± 228</td>
<td></td>
</tr>
<tr>
<td>After</td>
<td>2406</td>
<td>3011</td>
<td>2683 ± 220.9</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>40</td>
<td>400</td>
<td>246 ± 107</td>
<td></td>
</tr>
</tbody>
</table>

*p value homogeneity using levene test

After doing the normality test we do homogeneity test. This is to find out the data variants in 2 or more populations are the same or not because it is possible if the data variant in a population is different, so when given an intervention, the results will also be different. The homogeneity test results in table 4 show p value 0.50 (> 0.05) which means that the data variant is homogeneous or the same.
The Effects of Acupressure Point Gallbladder 21 (Jian Jing) and Stomach 18 (Ru Gen) on the Breast Milk Production in the Postpartum Mothers

Table 5. The Effect of Acupressure Point Gallbladder 21 (Jian Jing) and Stomach 18 (Ru Gen) on the Breast Milk Production in the Postpartum Mothers.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>Mean ± SD</th>
<th>*p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Milk Production</td>
<td>Treatment pretest</td>
<td>2889 ± 168.6</td>
<td>0.0001</td>
</tr>
<tr>
<td>(Infant BB Indicator in grams)</td>
<td>Treatment posttest</td>
<td>2776 ± 145.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control pretest</td>
<td>2901 ± 228.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control posttest</td>
<td>2683 ± 220.9</td>
<td></td>
</tr>
</tbody>
</table>

*p value paired t test

P value of the value of paired t test in table 4 shows p value 0.0001 (<0.05) in both the treatment and control groups. Thep value of the value of the two groups equally has a significant effect but in the treatment group the average body weight before and after the intervention is 2889 grams to 2776 grams with a difference of 112 grams. In the control group, the average body weight of 2901 grams became 2683 grams with a difference of 226 grams so that even though the two groups had the same significant effect, the weight loss in the treatment group or group given acupressure gallbladder 21 and stomach 18 had a smaller decrease than weight loss in the control group so that it can be said that there is a significant the effect of acupressure gallbladder point 21 and stomach 18 on the breast milk production in the postpartum mothers.

Differences the Effects of Acupressure Point Gallbladder 21 (Jian Jing) and Stomach 18 (Ru Gen) on the Breast Milk Production in the Postpartum Mothers

Table 6. Differences the Effects of Acupressure Point Gallbladder 21 (Jian Jing) and Stomach 18 (Ru Gen) On the Breast Milk Production in the Postpartum Mothers.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>Mean ± SD</th>
<th>*p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Milk Production</td>
<td>Treatment</td>
<td>112.45 ± 42.78</td>
<td>0.001</td>
</tr>
<tr>
<td>(Infant body weight)</td>
<td>Control</td>
<td>246 ± 107</td>
<td></td>
</tr>
</tbody>
</table>

*p value independent t test

Based on table 6 it can be seen that the average infant weight loss in the treatment group 112.45 with SD 42.78 and in the control group the average dropped 246 with SD 107. Obtained p value is 0.001 (<0.05). In this study the researchers also wanted to know the difference in the effect of acupressure point’s gallbladder 21 and stomach 18 on the breast milk production in the postpartum mothers. Before carrying out the statistical test the researcher tested the normality of the data and obtained results in the treatment group p value 0.077 (> 0.05) and in the control group 0.264 (> 0.05) so that said normal data distribution and can use independent t test.

The results obtained by the treatment and control groups even though they were the same had a significant effect but the average value of decline between the treatment and control groups more decreased, which means the control group was 246 grams, while in the treatment group it only dropped 112 grams so that it could be said there was a significant effect on the acupressure gallbladder point 21 and stomach 18 on the breast milk production in the postpartum mothers.

Can be concluded that acupressure is effective for nursing mothers because of the low cost of acupressure, no complications and ease of learning and how to use it, acupressure can be introduced as another method to increase milk production in mothers who complain of hypogalactia [16].
DISCUSSION

The first characteristic is that the average age of respondents is between 20-35 years with 10 respondents (90.90%) in the treatment group and 11 respondents (100%) in the control group, where at this age is a productive age so that is the right time to get pregnant, give birth and produce milk. The age of a mother greatly determines maternal health because it is closely related to the condition of pregnancy, childbirth and childbirth, and how to care for her baby. Mothers aged 20-35 are referred to as "adulthood" and are called reproductive periods, where at this time people are expected to be able to solve the problems faced calmly emotionally, especially in the face of pregnancy, childbirth, childbirth and caring for the baby later. That increasing age, knowledge presentation is getting better because it is caused by access to information, insight and mobility that are increasingly high. Increasing age, the mother's knowledge about breast milk will be better. Knowledge gained during life about breastfeeding will be better, so that the mother's age will affect the mother's decision to give or not to give breast milk to her baby [17].

The level of education of the respondents conducted by the study shows that the average respondent is at the higher education level, namely D3 (bachelor) or S1 (master degree) in the treatment group with 7 respondents (63.63%) and in the control group 8 people (72.72%) [17]. Education is estimated to have something to do with the knowledge of breastfeeding mothers in providing breast milk this is related to the level of knowledge of mothers that a person with higher education will know broader knowledge than the level of education low. Mother’s education level can influence mother's knowledge about breast milk production. The higher the education that is taken by the mother, then the possibility of getting information about breast milk will also increase so that the mother can decide to give or not give breast milk to her baby [17].

Job status of respondents conducted by the study found that the average respondents worked 9 respondents (81.81%) in the treatment group and 8 respondents (72.72%) in the control group. Knowledge of respondents who work better when compared to the knowledge of respondents who do not work. This is because mothers who work outside the home (formal sector) have better and wider access to various information, including getting information about breastfeeding [17].

The parity of the research respondents was obtained by the average parity namely multipara. In both treatment and control groups, the same number was obtained by 6 respondents (54.54%). States that having given birth to a mother is experienced in handling her baby, so this contributes to the knowledge of mothers in breastfeeding. The experience of giving birth can increase the mother’s knowledge about giving colostrum. This will also affect the mother's decision to give breast milk or not to her baby [17].

The characteristics of the respondents in the research conducted show that all the characteristics that exist in the study are homogeneous or have the same data variants so that the characteristics consisting of age, education, work and parity are considered no affect the dependent variable or mothers milk production.

The baby weight as an indicator of the breast milk production based on the results of the study showed that in the treatment group all postpartum mothers had good breast milk production as many as 11 respondents (100%) with the data that all babies had weight loss but no more than 7% birth weight. This is in accordance with the theory that the assessment of breast milk production can use several criteria as a reference to determine the smooth production of breast milk. To find out whether the milk production is smooth, it can be known by the baby indicator. The indicator for infants including BB babies does not fall more than 7% of birth weight in the first week of birth [15].

The average value of body weight before is 2889 grams and after 2776 grams with a difference of 112 grams which when compared is still greater than the average value of the baby weight control group that is from the average weight of 2901 grams to 2683 grams with a difference of 246 grams so that all respondents have good breast milk production aside from the support of the husband who lives with the respondent, family support from biological parents or in-laws who help the mother in caring for the
baby, assessment and cooking so that the needs of rest, nutrition and mother's mind are more calm and fulfilled. In addition to the husband and family support factor, the mother received acupuncture point gallbladder 21 and stomach 18 so that the mother felt more comfortable, relaxed and calmer while breastfeeding that the breast milk production was swift.

The result is in line with research by shown that in the test of differences in comfort levels between groups of respondents with LSD test between 3 groups namely oxytocin control and massage group, control and acupuncture group, oxytocin massage group and acupuncture group showed the most significant group was the control group and acupressure with a value of 0.01 (p <0.05) while the other two groups had no significant difference with p = 0.0147 and 0.214 (p> 0.05). The statistical test results of increasing breast milk production between 3 groups also found that there was a significant difference between the control group and the acupuncture group with a value of p = 0.004 (p <0.05) and non-significant results in the control group and oxytocin massage with a p value = 0.349 (p > 0.05) and significant results in the oxytocin and acupuncture massage group with a value of p = 0.037 (p <0.05) [14] and, this is in accordance with the book entitled "Loving Touch Mom Massage, Baby Massage and Spa" that acupressure technique is a technique that is guided by comfort food for the soul, therapy for patient comfort which includes massage. And the point of stimulation is gallbladder 21, which is the highest point located above the trapezius, which is between the base of the neck parallel to the spinousus C7 (GV 14) and the shoulder slightly backward. Apart from being able to stimulate let down of reflexes and secreting prolactin, this point of oxytocin can also trigger uterine contractions and bleeding. In addition to the point of stomach 18 which is around 4 fingers below the breast or in the 5th rib can also increase blood circulation so that it stimulates the alveolus to contract so that the milk is pushed towards the nipple [10].

From the research conducted on 11 control group respondents who were all given the same normal postpartum care in the form of health education about the correct breastfeeding technique the results showed that most postpartum mothers had less breast milk production of 8 respondents (72.72%). While there were found 3 respondents (27.27%) who had good breast milk production. Eight respondents who had less the breast milk production due to family support were less like their husbands working far away, living in a house with in-laws who were emotionally less close, postpartum mothers also felt less rest because babies were fussy especially at night and differences in both psychological and physical conditions childbirth mother. This is in line with the research conducted by mothers who are in a state of stress, chaos, anger, sadness, lack of confidence, too tired, mothers do not like breastfeeding and lack of support from family and husband are psychological factors that can interfere mother's milk production.

Three respondents who have breast milk production are good because of the three respondents breastfeeding well, both in terms of emotional or psychological and in terms of breastfeeding techniques, family support already have previous breastfeeding experience [18].

Based on the results of the research conducted, it can be seen that there is a significant effect of acupuncture gallbladder 21 and stomach 18 on the breast milk production in the postpartum mothers with the analysis of the normality test data obtained in the treatment and control groups before and after the intervention in table 4 shows that p value >0.05 which means data distribution and distribution of data from all normal groups and can be interpreted as representing a population. With normal data distribution, parametric tests can be carried out, namely independent t test. After doing the normality test, the homogeneity test is done first to find out the data variants in 2 or more populations are the same or not because it is possible if the data variants in a population are different, when given an intervention, the results will also be different.

The homogeneity test results in table 4 show the value of p value > 0.05 which means the data variant is homogeneous or the same. P value for independent test t test in table 6 shown p value 0.0001 <0.05 both the treatment and control groups. The value of the p value of the two groups equally has a
significant effect but in the treatment group the average body weight before and after the intervention is 2889 grams to 2776 grams with a difference of 112 grams. In the control group, the average body weight of 2901 grams became 2683 grams with a difference of 218 grams so that even though the two groups had the same significant effect but the weight loss in the treatment group or group given gallbladder 21 acupressure and stomach 18 had a smaller decrease than weight loss in the control group that the assessment of breast milk production uses indicators of infant weight as a reference to determine the smooth production of breast milk with the reference criteria for infant weight not falling more than 7% of birth weight in the first week of birth [15].

It can be said that there is a significant effect of acupressure points gallbladder 21 acupressure and stomach 18 on the breast milk production in the postpartum mothers. The researcher also wanted to find out the difference in the effect of gallbladder 21 and stomach 18 on the breast milk production in the postpartum mothers. Before carrying out the statistical test the researcher conducted a normality test of the data and obtained results in the treatment group p value 0.077 (> 0.05) and in the control group 0.264 (> 0.05) so that said data distribution was normal, the statistical test performed was paired t test. Previously the homogeneity test was carried out first with the results of p value 0.012 (> 0.05), which means that the data variant is homogeneous or the same. The results of the paired t test showed a p value of 0.001 (<0.05) in the treatment group and p value of 0.002 (<0.05) in the control group, which mean there was a significant effect. The results obtained by the treatment and control groups although the same have a significant effect but the average value of decline between the treatment group and the control group has decreased which means that in the control group is 246 grams, while the treatment group only drops 112 grams so that it can be said there was a significant effect of acupressure points gallbladder 21 and stomach 18 on the breast milk production in the postpartum mothers.

The volume of breast milk produced and released by the breast gland can be different based on the factors that influence it [19]. The production of breast milk that the mother will produce in her breast glands is not the same every time. Breast milk production refers to the volume of breast milk released by the breast and the amount of breast milk is assumed to be the same as the production of breast milk. Increasing and decreasing breast milk production can be influenced by several factors such as food consumed by the mother, peace of mind and mind, contraceptive use, breast care, breast anatomy, physiological factors, resting pattern, baby suction factor or breastfeeding frequency, baby's birth weight, gestational age giving birth and consumption of cigarettes and alcohol [20]. One way to increase breast milk production through one of the influencing factors was acupressure points gallbladder 21 and stomach 18.

The results of this study are also in line with the results which shown that acupressure caused an increase in the volume of breast milk in mothers, especially those who complained of hypogalactia with a value of p = 0.001 (p <0.05). Prolactin is one of the basic hormones in the secretion of breast milk and increases milk production. Based on traditional Chinese medicine, stimulation of several points in the body can cause balance in blood circulation, hormone secretion, and other factors, which can increase the predication and secretion of breast milk. Stimulation of some acupressure points can increase prolactin, oxytocin and consequently, produce better milk production. Although the accupoints used in acupressure is the same as the point used in acupuncture, because of the non-invasive nature of acupressure, compared to acupuncture, it seems that the application of acupressure to increase breastfeeding is more effective because many mothers who do not agree to acupuncture with needles [16]. In a study of 70 pregnant women, it could decrease the mean value of labor pain in the active phase of labor through acupressure in India [21]. Other similar studies conducted on the effects of acupressure at the stage of labor and pain were from Lee and Smith. Based on the results of these studies, the patient's need to use oxytocin drugs during labor is also reduced, it can be concluded that acupressure increases the hormone oxytocin and this is one of the effective substances in breastfeeding success [22, 23]. Another study conducted that breast milk production mothers are strongly influenced by psychological factors. Mothers who are always in a state of anxiety, lack of confidence in stress, fear, visitors who are
not sympathetic to him, and various forms of emotional tension will result in mothers failing to breastfeed their babies because this condition can inhibit the release of the hormone oxytocin, preventing milk from entering the breast vessels. The tranquility of the mother's soul is also influenced by family support, husband and health workers [24]. This is obtained all in acupressure.

The disadvantage in this study is that the research carried out did not analyze all confounding variables. Acupressure is still unfamiliar to the community so researchers need a long time to introduce it first and it is often difficult to convince postpartum mothers to be willing to become research respondents.

The indicator of breast milk production used by researchers in this study is limited to reducing infant weight. The scope of the study area is still limited to only two health center working areas. For researchers in designing future studies is better not only use two acupressure points, to measure the effect of acupressure on milk production can use a more precise measurement of the hormone prolactin and carry out research in a bigger area not only in two regions and the duration of acupressure is more longer.

CONCLUSIONS

Based on the results of these studies it can be used to increase and improve breast milk by studying acupressure point’s gallbladder 21 and stomach 18.

For the next researcher, it is expected to be able to add acupressure points, use the hormone level prolactin as an indicator, conduct research in a wider area and a more varied duration of giving acupressure.

REFERENCES


