Effect on the improvement of method methoxy hormone prolaktin normal postpartum women

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ABSTRACT

Background
The purpose of development in Indonesia emphasize IMR, the IMR is now 25.5 deaths per 100 live births, causes of death are diarrhea, and infection. To prevent deaths by providing exclusive breastfeeding. Interventions that can be done is by feeding the right so as to make future generation of intelligent, healthy and away from poverty.

Aim
To prove the effect of the methoxy method to high levels of the hormone prolactin and milk production in mothers postpartum normal.

Method
Quasy experiment with pretest and posttest design with control group. Samples numbered 24 people were divided into 2 groups. Intervention and control groups were given the intervention for 14 days, prolactin levels checked before and after treatment.

Results
There are significant differences between the control group and the intervention group, there are increased levels of the hormone prolactin with p value <0.005.

Conclusion
Methods Methoxy affect the hormone increases prolaktin normal post partum mothers.

Keywords: Methoxy method, Hormpn prolactin, The milk production, Normal postpartum mothers

INTRODUCTION

Lactation is a condition in which the physiological changes in the breast post partum that can produce milk. Post partum is an important time, because of the possibility of bleeding can occur where this risk can be reduced by feeding .. The days post partum there are physiological changes of the mother, because when these mothers feel pain from the scar, feeling tired, if not monitored mother can just be depressed or even stress. [1]

One of the objectives of development in Indonesia is emphasizing the infant mortality rate (IMR), is now AKB 25.5 deaths per 1,000 live births. The cause of infant mortality are diarrhea and other infectious diseases. To prevent infant
deaths most important thing is to give exclusive breastfeeding. In ASI there are various sources of vitamins and minerals. Vitamin in breast milk that serves as the durability and the baby's immune system is vitamin A and a myriad of benefits and substances and vitamins needed by the baby's intelligence, endurance, as well as the optimal infant growth. [2, 3]

Mother's Milk (ASI) is a liquid and very good life baby needs, is easily digested by the baby and have nutritional balance. Babies can naturally regulate the amount they eat according to their needs, thereby reducing the risk of obesity. [4] In breast milk there are also a wide variety of vitamins, minerals, fats, fosofor, lactose, unsaturated fatty acids as the immune system in the process of growth and development of infants. [5]

In Indonesia, the adequacy rate of exclusive breastfeeding Indonesia Demographic Health Survey (IDHS) in 2007 by 34% rising to 42% in 2012. Meanwhile, according to reports each provincial health department in the know that the distribution coverage of exclusive breastfeeding at infants 0-6 months of 53.4%. Exclusive breastfeeding for infants <6 months globally less than 40%. Estimates of the national results of the analysis showed exclusive breastfeeding for 54.3% of the total number of babies 0-6 months or in absolute terms amounted to 1,348,532 babies or other terms as much as 1,134,952 infants aged 0-6 months are not getting exclusive breastfeeding. So the scope of exclusive breastfeeding is still considered lacking in Indonesia. [6]

A common problem and complained of by the mother is breastfeeding postpartum breast milk has not come out or not much in the first days after birth, so it is important to stimulate the hormone prolactin and oxytocin plays a role in lactation. [9] One method that can be done is by massaging and stimulating the breast using a hand so that optimal breastfeeding exit (Marmet technique), because it can provide a stimulus to the breast muscles to work effectively so that trigger breast milk letdown reflex. [10]

Massage oxytocin gives a sense of comfort, secure, reduce swelling, mempelancar milk. That is done by massaging on the back spine until ketulang costa to 5 or 6 which will stimulate prolactin dikeuarkan by hypofisis anterior and the hormone oxytocin, will occur when the baby sucking reflex and stimulates prolactin hormone prolactin to produce milk. [11]

Massage is one of the complementary services, complementary service efforts that midwives are part of the implementation of komlementer and alternative medicine in providing midwifery services, in Indonesia complementary health services has been regulated in the Indonesian Health Ministry Decree No.1109 / Menkes / Per / IX / 2007 about complementary-alternative medicine. [12-14]

WHO (Word Health Organization), said medication or complementary therapy is the treatment of non-conventional that do not originate from the country concerned, complementary therapies are countermeasures penayakit performed as a support or companion to conventional medical treatment or it may be as an alternative treatment other options beyond medication conventional medical. This means that complementary medicine is a treatment that has been recognized and can be used as a companion to conventional medicine / medical. -Alternatif complementary medicine service law is the Law Decree No. 36 of 2009, section 1, point 16 of the traditional health care is treatment or treatment with drugs way that draws on the experience, specific to the skills, hereditary secar empirical that can be justified and applied in accordance with the norms prevailing in society. Article 48 traditional health services. Chapter III, article 59 s / d 61 of the traditional health care. Minister of Health Decree 120 / Menkes / SK / 2008 on hyperbaric health services. Decision of the Director General of Medical Services No. HK.03.05 / I / 199/2010 on guidelines for the criteria on criteria for determination of treatment methods komlementer-alternative treatment methods that can be integrated in health care facilities. Decision of the Director General of Medical Services No. HK.03.05 / I / 199/2010 on guidelines for the criteria on criteria for determination of treatment methods komlementer-alternative treatment methods that can be integrated in health care facilities. Decision of the Director General of Medical Services No. HK.03.05 / I / 199/2010 on guidelines for the criteria on criteria for determination of treatment methods komlementer-alternative treatment methods that can be integrated in health care facilities. [8, 12, 13, 15]
The types of health services komlementer among other things: the intervention of the body and mind (hypnotherapy, mediation, spiritual healing, prayer and yoga), the service system of alternative medicine include (akupresure, naturopathy, homeopathy, aromatherapy, ayurveda), a way of healing the manual includes (chiropractics, healing touch, tuina, shiatsu, osteopathy, massage sequence), treatment of pharmacology and biology (herbs, herbal, gurah), diet and nutrition for the prevention and treatment (diet macro nutrients, micro-nutrients), other ways of diagnosis and treatment include (therapy ozone, hyperbaric, EECP). [12, 16]

From the background mentioned researchers interested in conducting research on methods of methoxy method itself is a combination of massage techniques Marmet and oxytocin which has a goal to drive the prolactin levels. If only do massage on the spine to the costa 5-6 only (massage oxytocin) to produce the hormones oxytocin and prolactin for ditulang back massage will stimulate neurotransmitters to oblungata cord then sent to hypofise anterior in order to calm the mother, gives a sense of comfort so that it can produce breast milk, while in Marmet is performing massage techniques and express the milk with the aim of stimulating the breasts by hand so that the milk to be smooth.

RESEARCH METHODS

This research is a design quasy experiment with pre and post test control group design to determine the effect of the methoxy method on prolactin levels in normal post partum mothers. Researchers divided respondents into two groups: a control group and intervention group, both groups are then measured levels of prolactin test is conducted prior (pretest) and then in the intervention group was given a method methoxy for 14 days, while the control group were only given care puerperal only for 14 days, then the researchers remotely measured the levels of prolactin and on day 15 (posttest)

RESEARCH PURPOSES

General purpose

To prove the effect of the methoxy method to high levels of the hormone prolactin and milk production in mothers postpartum

RESEARCH RESULT

Homogeneity Characteristics of Respondents

Table 1. Characteristics of Respondents

<table>
<thead>
<tr>
<th>characteristics</th>
<th>Group</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td>Mean ± SD</td>
<td>N</td>
</tr>
<tr>
<td>&lt;20</td>
<td>0</td>
<td>25.67 ± 4.479</td>
<td>1</td>
</tr>
<tr>
<td>20-25</td>
<td>6</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>6</td>
<td>50</td>
<td>9</td>
</tr>
<tr>
<td>parity</td>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>primiparas</td>
<td>7</td>
<td>58.3</td>
<td>6</td>
</tr>
<tr>
<td>multiparas</td>
<td>5</td>
<td>41.7</td>
<td>6</td>
</tr>
<tr>
<td>Grandemultipara</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1. Shows results prekuensi age and parity distribution of respondents. The intervention group 6 respondents aged between 20-25 years, 6 respondents aged> 25 years, the average age of 25.67 years, and in the control group 1 respondents aged <20 years, 2 respondents aged between 20-25 years, and 9 respondents more than 25 years old, the average age of 29.42 years with p value 0.446, it means that the age of the mother is homogeneous or have the same variant. Parity in the intervention group 7 respondents primiparas, 5 respondents multiparous, and in the control group 6 respondents primiparas, 6 respondents multiparous, with p value...
of 0.581, meaning that parity respondents have the same variant or homogeneous.

NORMALITY DATA

This distribution normality test using the Shapiro-Wilk. Data is said to be normally distributed if the value of p> 0.05. Normality test data in this study using SPSS program version 21. The distribution normality test result can be seen in the tables below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>prolactin Pre</td>
<td>208.16</td>
<td>303.91</td>
</tr>
<tr>
<td></td>
<td>39.45</td>
<td>59.10</td>
</tr>
<tr>
<td>P value</td>
<td>0.100</td>
<td>409</td>
</tr>
<tr>
<td>prolactin Post</td>
<td>278.00</td>
<td>327.00</td>
</tr>
<tr>
<td></td>
<td>46.882</td>
<td>82.283</td>
</tr>
<tr>
<td>P value</td>
<td>0.666</td>
<td>0.145</td>
</tr>
</tbody>
</table>

Table 2. Normality Prolactin Levels Before and After Treatment

<table>
<thead>
<tr>
<th>Variables</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>prolactin Pre</td>
<td>208.16</td>
<td>303.91</td>
</tr>
<tr>
<td>prolactin Post</td>
<td>278.00</td>
<td>327.00</td>
</tr>
</tbody>
</table>

Table 2. Shows the normality test results data on the levels of the hormone prolactin, the hormone prolactin mother normal distribution of data, with p value> 0.05.

Table 3. Differences Prolactin Levels Before and After Treatment On Intervention and Control Groups,

<table>
<thead>
<tr>
<th>Variables</th>
<th>Value</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prolactin levels</td>
<td>N</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>mean</td>
<td>208.16</td>
<td>278.00</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>39.45</td>
<td>46.88</td>
</tr>
<tr>
<td></td>
<td>Min</td>
<td>161.00</td>
<td>205.00</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>269.00</td>
<td>347.00</td>
</tr>
</tbody>
</table>

* Paired Sample Test

Table 3. Shows the difference in levels of the hormone prolactin and the value of milk production before and after the intervention. In the intervention group before the intervention the average levels of the hormone prolactin, 208.16 ng / ml, the lowest prolactin levels 161.00 ng / ml, the highest 269.900 ng / ml, after getting the intervention the average levels of the hormone prolactin rose to 278.00 ng / ml, the lowest 205.00 ng / ml and the highest 347.00 ng / ml, p value of 0.000 (p <0.05). So we can conclude the levels of the hormone prolactin increases with methoxy doing so in the intervention group significantly the levels of the hormone prolactin.

Whereas in the control group before the intervention the average levels of the hormone prolactin 303.916 ng / ml, the lowest 205.00 ng / ml, the highest 38.0 ng / ml, after intervention methoxy average value of the levels of the hormone prolactin fell to 327.00 ng / ml, the lowest 208.00 ng / ml and the highest 402.00 ng / ml, p value 0.272 (p > 0.05). So we can conclude padaa control group no significant levels of the hormone prolactin.

Differences in levels of the hormone prolactin and milk production between the intervention and control groups.

Table 4. Differences in levels of the hormone prolactin and milk production between the intervention and control groups

<table>
<thead>
<tr>
<th>Variables</th>
<th>mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prolactin levels Δ</td>
<td>302.50</td>
<td>59.437</td>
<td>205.00</td>
<td>402.00</td>
<td>0.040 *</td>
</tr>
<tr>
<td></td>
<td>46.4538</td>
<td>56.425</td>
<td>104.00</td>
<td>140.00</td>
<td>0.039 *</td>
</tr>
</tbody>
</table>

* Independent T test
Table 4. Shows the difference in levels of the hormone prolactin and breast milk-producing plant in the intervention group and the control group. From the above results it can be concluded that there is a difference signifikaan prolactin levels between the intervention and control groups with p value <0.005.

**DISCUSSION**

**characteristics of Respondents**

The results of the analysis of the characteristics respondents in this study all respondents are in the reproductive age between 20-35 years. The average age at intervention methoxy group is 20-25 years and above 25 years. In the control group the average age of> 25 years. In the intervention group many respondents primiparas, whereas the control group response primiparous and multiparous. Age is one factor that affects the uterus decrease mothers with older age are influenced by the aging process. maternal age effect on milk production, mothers aged 20-35 years have adequate milk production. [10]

Other factors that also affect milk production is parity mothers, mothers often give birth will easily breastfeeding her baby, because it already has previous experience, while at the primi mothers need time to breastfeed her baby.

Breastfeeding in the first hour after birth the average mother can not breastfeed with the maximum it will hinder the process of breastfeeding, it is an alternative that can be done is by oksitoisn massage. [85] Massage oxytocin is massage done along the spine (vertebrae) to the bone costae that to five-six that aims to address the lack of launch breastfeeding, where mothers are massaged to increase the milk production, in addition to the massage oxytocin can influence the success of breastfeeding mothers the days postpartum.

**Against Methoxy influence hormone Prolactin levels**

Methods methoxy aims to stimulate breast gland and breast muscles work effectively, when the gland and breast muscles work Effective give the effect of a sense of comfort and emptying the lactiferous sinuses, while the lactiferous sinuses empty then the milk will produce so as to eject the milk smoothly. The combination of massage techniques oxytocin Marmet and will provide stimulation to the spinal cord to the medulla oblongata then neurotransmitter who will carry the message to the posterior hypofisis that secrete the hormone oxytocin that stimulates prolactin to work out the milk so that the milk production to be increased.

At the time of the intervention methoxy to maternal mother's response accepting and happy, mother says breast milk has not come out or partially mother mengatakn breast milk is a little ring, and so when asked if the mother is breastfeeding some mothers told not to breastfeed there is also found mothers who suffered dam ASI, At the time of the intervention of mothers say it is very comfortable, because while breast and massaged dairy milk that previously did not come out to be out, so the mother can breastfeeding her baby. Breastfeeding can be done anytime (ondeman) or a maximum of 2 hours once the baby should be breastfed. It is the same with Barirah research. [88] In the process of feeding the baby has a reflex to suck, when the baby sucking the breast, there will be reflek letdown (reflex issued) baby sucking will stimulate the hormone oxytocin which will stimulate the cells around aveoli works that push the milk out into the nipples therefore increasingly long and often suck the baby will be many maternal milk production.

Calculation of the statistical test levels of the hormone prolactin experiencing significant kenaikan after intervention undertaken 2x1 methoxy day. Methoxy is one method to be able to skim milk production. Effort in doing is to do massage and flushed breasts and massaging the spine which aims to stimulate the milk production process that dikedalikan by the hormone prolactin and processing of milk is controlled by the hormone oxytocin.

Prolactin levels in breastfeeding mothers will return to normal after 3 months postpartum, on day 2 and 3 after childbirth progeston and estrogen hormone levels will decrease drastically will increase to 10-20 x fold if the mother is breastfeeding, prolactin hormone levels while not pregnant ie 2-10 ng / ml.

Research conducted Jamilah there are increased levels of the hormone prolactin in the intervention group and the oxytocin massage techniques performed effeulearge mothers treated for 2x a day and evening, at the time of the hormone prolactin
mlm day will be more. When do methoxy in the intervention group increased levels of the hormone prolactin, which is significant before and after the intervention compared with the control group, which at the time was done methoxy will stimulate the muscles and mammary glands sehingga induce relaxation and emptying the lactiferous sinuses, while lactiferous empty it stimulates milk production continuously and hormones that produce milk dikendalika by the hormone prolactin, oxytocin sedangkan on when paghinnga massage effect higher prolactin.

The hormone prolactin functioning as milk production, combination techniques Marmet and massage oxytocin would provide stimulation to the bone marrow back into the medulla obligata then neurotransmitter who will carry the message to hypofisis posterior to release the hormone oxytocin that stimulates prolactin to work out the milk so that the milk production becomes smoothly and prolactin increase.

From the statistical test of correlation there is no connection between prolactin levels to increase in weight in weight, frequency of bowel movement, frequency of urinating, frequency of breastfeeding. To mempelancar milk production is not only stimulating hormone prolactin are berrperan, but with the letdown reflex that occurs when the baby sucking will stimulate the lactiferous sinuses to keep producing milk. In addition lactation bebrap also influenced by factors such as age, nutrition, emotional, psychological, physiological mother and others.

CONCLUSION

Based on the results of research and discussion about the influence of the methoxy method hormn elevated levels of prolactin in normal postpartum mothers can conclude there are significant methoxy method to increase levels of the hormone prolactin in the intervention group after being given methoxy treatment for 2x daily until day 14 for 15-30 minutes with p value <0.05.

SUGGESTION

Maternity postpartum

For postpartum mothers may use methoxy method as non-medical alternative method to increase prolactin levels and milk production because the method is very safe, cheap and easy. Can be done by the husband or family member who petrified / accompany childbirth

For health agencies

a. Would be expected to carry out the dissemination of the methoxy method as non-medical alternative method to increase the hormone prolactin
b. To midwives, nurses, other medical personnel also should be willing to apply this method as an alternative method methoxy nonmedical to increase levels of the hormone prolactin

For further research.

a. Further research is needed to correct existing deficiencies in this study
b. Similar research is needed to do to find the differences in the level of knowledge and skills of nurses, midwives and other health workers in imposing a methoxy method for Meningkaatkan hormone prolactin
c. The need for other teaching strategies, such as modules and other skills development programs to assess knowledge about postpartum maternal methoxy method to increase the hormone prolactin.
d. The results of this study can be used as a reference library for further research.
e. Future studies are able to develop methods to better benefits, not only to increase prolactin levels can be useful to others..

For Educational Institutions

a. Entering non-medical alternative method to solve the problems of postpartum maternal milk production
b. Provide support or support the students (especially medical students) to want to explore methods to add prolactin levels.

BIBLIOGRAPHY


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