Herbal Package

by Agrina A

Herbal Package to Reduce Pain of Uterine Contractions (Senggugut Pain) on Postpartum Mother

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Abstract: Childbirth is a long and tiring process and can even take a mother's life. According to WHO (2018), as many as 303,000 women per year have lost their lives during childbirth as a result of complications arising from pregnancy. This is equivalent to around 830 women dying every day or one person every two minutes. The birth process causes pain in the birth canal. Pain is also experienced by the mother as a result of contractions due to changes in the uterine muscles becoming normal. The purpose of this study is to make a package of herbal ingredients that are useful for overcoming the pain of maternal uterine contractions or usually called as postpartum pain. Research methods. The method used in this study was the manufacture of herbal packages and then tested on 30 respondents of mothers after giving birth to the second child and so on who experience uterine contractions pain. Results. From the results of the study it was found that compressing the herbal package can reduce the pain of uterine contractions (senggugut pain) of mothers after giving birth. This means that mothers who are given herbal pack compresses have decreased postpartum pain. Recommendation. It is expected that this herbal concoction package will be able to help postpartum mothers increase their comfort, since this package is useful for reducing or managing pain due to uterine contractions after giving birth.

Keywords: Herbal package, Senggugut pain, Uterine contractions, Post-partum mother.

INTRODUCTION

The process of childbirth is a tiring process for the mother because besides the mother expends extra energy, the mother also expends a lot of blood. This condition makes the mother extremely exhausted. The process of giving birth will also cause pain due injuries in the area of the birth canal. After giving birth, the mother will feel pain throughout the body because the delivery process takes a long time and heavy. Ribs ache, stomach rumbling, and discomfort in the back and in the birth canal due to childbirth. After pushing movements during labor, usually the mother feels very tired and experience pain. The pain experienced by the mother does not stop there, however, since constant pain is still experienced after childbirth and still continues to be felt up to several days after giving birth. The pain after childbirth, or called as senggugut pain, is caused by contractions in the uterus that shrinks back to the size as it was before pregnancy. This process is called involution or in the regional language is called as senggugut pain. Pain after childbirth is usually mild in first-time mothers, and does not last long. However, the pain can be very severe after the second birth and usually gets worse with each subsequent birth[2]. This condition is because at first the mother has better uterine muscle health, so the uterus tends to wrinkle and keep wrinkling, relaxing intermittently, and then shrinking back[3]. The pain is most intense on the first or second day after giving birth and gradually decreases on the third or subsequent day, although it can take up to 6 weeks or more for the uterus to return to its normal size. Breastfeeding can make this pain more felt because the baby's sucking can trigger the release of the oxytocin hormone, which can cause contractions[2] Postpartum uterine contractions are indeed a problem for women after childbirth. Women will be uncomfortable and even cause anxiety because it interferes with the activities of caring for their baby. Several herbs are useful for dealing with pain or discomfort[4,5]. The herbal plants that can reduce senggugut pain are ginger[6,7], galangal[8,9], turmeric[10,11], and green tea[12,13]. The four types of plants are very much useful, since their benefits

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include reducing inflammation and eliminating pain[5]. The herbal package in this paper is a package that contains a mixture of ginger, turmeric, galangal, and green tea that have been dehydrated and put into a package. The package later functions as a compress device on the abdomen area of the person who experience pain (senggugut) during post-partum.

METHODOLOGY

The trial use of this herbal package was conducted in two maternity clinics in the working area of Sidomulyo Inpatient Puskesmas in Pekanbaru from June to early September 2019 on 30 intervention group respondents and 30 control group respondents. After the herbal concoction package (PEBAL) was ready to be processed and packaged, then it was compressed on 30 post-partum mothers who experience painful pain. The production of this package consists of herbal ingredients such as galangal, turmeric, ginger, and green tea by using the following procedure: the basic ingredients of ginger, galangal, and turmeric were cleaned and roughly shaved; after all the ingredients are shaved; they were then left in the sun to dry; the Green tea leaves is also dried. When all the ingredients are dry, then they are wrapped in a thick cloth package that has been prepared in accordance with the desired size, and the herbal concoction package is ready to use. How to use PEBAL is by soaking in hot water and then dried and taped to the lower abdomen of the mother after childbirth. This is done for about 15 minutes until the heat of PEBAL has reduced and the compresses can be repeated two to three times. Data collection technique uses the purposive sampling. The respondents were 60 mothers who have given birth to the second child and so on and experienced uterine contractions pain. In the intervention group, 30 people were compressed with the herbal packages, while the other 30 people were not. Before and after compressing, the researchers measured respondents' pain levels. Tests were carried out three times for each sample of the intervention group.

ANALYSIS

Hypothesis testing that were used in this study is the dependent t-test and independent t-test. Dependent t-test was conducted to determine the difference in the average senggugut pain in mothers after giving birth before and after being given an intervention in the experimental group and the difference in the average intensity of senggugut pain in mothers after childbirth in the control group. Meanwhile, the independent t-test was to see the difference in average pain in postpartum mothers between the experimental group and the control group who were given the herbal package compress intervention. The requirements for the dependent t-test are that data must be normally distributed, both groups of data are dependent, and the variables are numeric. If the data are not normally distributed, a Wilcoxon alternative test is used instead. Meanwhile, for the independent t-test, test requirements are that the data must be normally distributed, both groups of data are independent, and the variables are numeric. If the data are not normally distributed, the Mann-Whitney alternative test is used instead. From the data calculation, the average reduction in senggugut pain in postpartum mothers is obtained. The average value will be used as a measurement of pain indications felt by mothers after giving birth. Measuring the level of pain was done with VAS (visual analog scale).

Pain intensity can be measured using visual analog scale (VAS). VAS is an instrument used to assess pain intensity using a 10 cm line table with a reading of a scale of 0 – 100 mm.

0 10 20 30 40 50 60 70 80 90 100

Interpretation of pain
>0 – < 10 = No pain
10 – 30 = Mild pain
> 30 – 70 = Moderate pain
>70 – 90 = Severe pain
> 90 –100 = Very heavy pain

RESULTS AND DISCUSSION

Univariate analysis

Univariate analysis was used to obtain a description of the characteristics of respondents which included age, number of births, latest education level, as well as to get a picture of the median intensity of contraction pain of the uterus after giving birth before and after being treated in the experimental and control groups will be described as follow.

Characteristics of Respondents: The characteristic respondents includes age, number of births, and education. The average age of respondents is in the range of 31-35 years (43.3%), the highest number of deliveries is the second birth (40%), and the highest level of education is high school (50%).

Pain Level

Table 1. Level of pain of contraction in postpartum mothers before and after treatment in the experimental and control groups (N = 60)

Groups		Median	SD	Min	Max
Experiment	Pre-test	7.00	0.681	5	7
	Post-test	4.00	0.828	3	6
Control	Pre-test	6.20	0.805	5	7
	Post test	6.20	0.805	5	7

From the table, it can be seen that the median value of post-partum senggugut pain before herbal package compresses in the experimental group was 7.00 with a standard deviation of 0.681. After compressing the herbal package three times, the post-contraction postpartum pain relief rate was significantly reduced with a median of 4.00 and standard deviation of 0.805. Meanwhile, in the control group, the intensity of back pain on the pre-test was 6.20 and remained 6.20 on the post-test, and the standard deviation of pre-test was 0.805 and post-test remained 0.805.

Bivariate Analysis

Bivariate analysis was used to see differences in maternal postpartum pain before and after the herbal package compresses containing ginger, galangal, turmeric, and green tea were given to 30 persons in the control groups. The results of the study show there is a difference if the p value <α (0.05). The data processing with statistical tests is done after the normality test was done to see that the data and is normally distributed or not normally distributed. Data Normality Test: Data normality test was performed on pre-test and post-test of senggugut pain in the experimental and control groups

Table 2. Normality test of pain in the experimental group and the control group

Group		N	p value
Experiment	Pre-test	30	0.000
	Post-test	30	0.001
Control	Pre-test	30	0.000
	Post-test	30	0.000

Table 2 shows the results of the normality test data with the Shapiro-Wilk test. The Shapiro-Wilk test was used because in this study the number of respondents in the treatment group was < 50 people. From the table above, it can be seen that the pre and post test data are not normally distributed as evidenced by the p-value of the pre-test of the experimental group, which is 0,000 and the pre-test control group has a p value of 0,000. This means that both groups have p values <α (0.05), and the value in the post-test experimental group had a p value of 0.001 and the post-test control group with a p value of 0,000, meaning that both groups had a p value <α (0.05). Since the data of the two groups are not normally distributed, they do not meet the parametric test requirements. Therefore, the Wilcoxon alternative test for paired data and Mann-Whitney alternative test for unpaired data were used. The differences in pain from post-partum delivery and pre-test in the experimental group

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Table 3. Differences in pre-test and post-test senggugut pain after childbirth in the experimental group

Variable	N	Median	SD	*p*value
Value of pain in Pre-test	30	7.00	0.681	
				0.000
Value of pain in Post-test	30	4.00	0.828	

From table 3 it can be seen that the median value of senggugut pain in postpartum mothers before the herbal package compressing is 6.47 with a standard deviation of 0.681 and the median value of senggugut pain in postpartum mothers after the herbal package compressing is 4.07 with a standard deviation of 0.828. Statistical analysis result obtained p value of 0,000 <α (0.05), it can be concluded that there are differences in maternal pain in post-partum pain before and after herbal package compressing (2.4) Differences in pre-test and post-test senggugut pain after childbirth in the control group

Table 4. The differences of pain from intermittent postpartum mothers in pre and post-test in the control group

Variable	N	Median	SD	*p*value
Value of pain in Pre-test	30	6.20	0.805	
				1.000
Value of pain in Post-test	30	6.20	0.805	

Table 4 shows the median value of postpartum maternal pain (senggugut pain) in the pre-test control group of 6.20 with a standard deviation of .805 and post-test maternal pain in the post-test control group, which remained 6.20 with a standard deviation of also .805. The results of statistical analysis obtained p value 1,000, meaning that the senggugut pain experienced by postpartum women is the same before and after measured 15 minutes later in the control group.

Differences senggugut pain in the experimental group and control group (post-test)

Table 5. Differences in senggugut pain experienced by postpartum mothers in the experimental group and the control group after the treatment (post-test)

Variable	N	Median	SD	*p*value
Experimental group	30	4.07	0.828	
				0.000
Control group	30	6.20	0.805	

Table 5 shows the results of the post-test analysis using the Mann-Whitney test, which obtained the median value of postpartum maternal pain (senggugut pain) in the experimental group which was 4.07 with a standard deviation of .828, while the median value in the control group was 6.20 with a standard deviation of .805. The statistical analysis results obtained p value 0.000, which means there are differences in changes in postpartum maternal pain (senggugut pain) relief between the group given herbal package compresses (PEBAL) and the control group who were not given herbal package compresses.

CONCLUSIONS

This study wanted to test the extent to which the herbal package (PEBAL) can reduce the pain of uterine contractions (senggugut pain) in mothers after childbirth. From the Wilcoxon test, it was found that the median value of senggugut pain experienced by after child birth mothers to the pre-test group was 7.00 with a standard deviation of 0.681 and a post-test value after obtaining a warm herbal package compress was 4.00 with a standard deviation of 0.828 with the difference in value after treatment is 2.4. From the results of these trials, it can be judged that there is an influence of herbal package delivery in reducing postpartum maternal pain (senggugut pain) (p-value 0,000). In the control group there is a pre-test median value of 6.20 with a standard deviation of 0.805 and a post-test median value in the control

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group of 6.20 with a standard deviation of 0.805 with a p value of 1,000, which means there is no decrease in pain after 15 minutes based on the pre- and post-test.

The results of the Mann-Whitney test analysis concluded that there was a significant influence between the administration of herbal packages in the experimental group and the control group on the reduction of senggugut pain in post-partum mothers. The results showed the p value of the treatment group and the control group were significantly different, where the p value of the treatment group was < 0.005 and the p value of the control group was > 0.005.

RECOMMENDATIONS

The results of this study are expected to be an alternative measure to reduce senggugut pain in postpartum mothers as a companion or substitute for chemical drugs. Using this herbal compress routinely has a better effect on postpartum mothers. Since this therapy is without side effects, it can be used by mothers after childbirth who experience contraction pain/senggugut pain until the pain is gone. The results of this study are also useful as evidence based practice for the development of nursing science.

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