EFFECTIVENESS OF ENDORPHIN MASSAGE AGAINST ANXIETY THE FACE OF LABOR ON MOTHER PRIMIGRAVIDA IN THE REGION OF CLINICS JAGIR SURABAYA

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Abstract

Most pregnant women in the society experience anxiety when facing labor, especially primigravida (a woman who is pregnant for the first time). Anxiety during labor can be manage by using Endorphin Massage. This study was purposed to find out the effectiveness of Endorphin Massage on anxiety during labor experienced by the primigravida women living around Puskesmas Jagir (community health cente) located in Surabaya. The study was Pre-Experimental in which the population involved the third trimester primigravida women, totaling 16 women living around the stated community health center. The samples were chosen using Non-Probability sampling by applying purposive sampling technique. The independent variable was Endorphin Massage, whereas the dependent variable was anxiety during labor. This study use HARS (Hamilton Anxiety Rating Scale) questionnaire to collect the data which were analyzed using Wilcoxon Signed Rank Test with the significance level α = 0,05. The result of study showed that among 16 respondents, 10 respondents (62,5%) without Endorphin Massage experienced mild anxiety after receiving Endorphin Massage. Moreover, the result of Wilcoxon Signed Rank Test showed that ρ= 0,001 < α = 0,05 illustrating that Endorphin Massage was effective to manage anxiety experienced by primigravida women during labor. Endorphin Massage was effective to decrease anxiety during labor. Therefore, nurse are expected to provide health education so that the primigravida women's level of anxiety will decrease.

Key words: Anxiety, Endorphin Massage

INTRODUCTION

Childbirth is a physiological process that allow the occurrence of a series of major changes to the expectant mother to give birth to janinnya via the birth (Aprillia Y, 2010). Birthing can be affected by several factors, namely the power or energy that encourages children, passage or pelvis, passager or fetus, placenta, and psychologic (Sukarni I, 2013). Psychological factors often happens on a mother in labor can be anxiety (Wagiyo & Putrono, 2016). Most in the community found pregnant women feel the anxiety in the face of labor, especially in the mother primigravida (first time pregnant). The anxiety they feel will be increased at the III trimester of pregnancy, because mothers worry about labor, labor pain, and newborn care.

Based on the preliminary studies conducted by researchers in November 2016 against 5 in primigravida mothers work-area Clinics Jagir of Surabaya, with the spread of anxiety questionnaires. Of 5 pregnant women primigravida obtained 2 people experience anxiety at the level of weight, because mom says it can't feel good night's sleep and waking up often during the night, experiencing discomfort due to changes in body condition significantly so that it becomes easy to anger and irritability, as well as curiosity berkemihnya. 1 people experience anxiety at the level of weight once, because it was afraid it would happen something on his son later, and felt the fear of labor later. And 2 people do not feel the anxiety, they said okay just do not feel the anxiety, and can adapt to changes in his body, as well as the mothers enjoy each change that occurs on its condition at the time was pregnant. From the data obtained that pregnant women who experience anxiety facing labor as much as 60% and pregnant women who do not experience anxiety in the face of labor as much as 40%.

Labor is a very stressful phase mainly on mother primigravida, this is because the mother was afraid and anxious face labor, fearing complications at the time of childbirth, and worrying about the birth of the baby. Anxiety affects physiological conditions. Any feelings of anxiety will improve the work of nerves sympathetic dystrophy. With the rise of nerves sympathetic dystrophy, will automatically improve the work of the heart resulting in increased pulse, respiration, blood pressure, diaphoresis, also hand sweating. Rising blood pressure resulting in iritabel the nerves in the head causing headaches, and insomnia or sleep disorders (Solehati T, 2015). So the existence of physical and psychological symptoms it would memperberat the mother's condition, which will lead to difficulty in birthing. The result of the anxiety that is not handled will cause abnormal birth until death.

Anxiety facing labor can be addressed in various ways, one of them using a non pharmacological therapy. Non pharmacological therapy is performed using Kilroy, acupuncture, acupressure and massage (Anik, 2010). One of the massage that can be used to reduce anxiety by Endorphin Massage.

Endorphin Massage is a therapeutic massage or light touch is a pretty important given to pregnant women, during the time leading up to the birth. This massage can stimulate the body to release endorphins which is a compound pain reliever and can create a feeling of comfort (Lanny, 2014). Endorphin hormone produced by our own bodies accurately produced by glands that are located under the prituitary of the brain. Endorphin is a number of polypeptide consisting of 30 units of amino acids. Opioid – opioids anti-stress hormones such as cortisol and catecholamines, kortikotrofin produced the body to reduce stress and relieve pain (Yesie, 2010). When Endorphin Massage is given then it can increase endorphin hormone levels in the body. Endorphin Massage can be done in the area of the back. So pregnant women can skip periods with pregnancy and childbirth, fluent and relaxed (Rizema s. p., 2016).

With respect to the background described above, researchers interested in researching on "effectiveness of Endorphin Massage Against Anxiety Facing Labor On Maternal health centers in the region Primigravida Jagir Surabaya."

As for the goal in this research is to analyse the effectiveness of Endorphin Massage against anxiety facing labor on

maternal health centers in the region primigravida Jagir of Surabaya.

THE CONCEPTUAL FRAMEWORK

On the research design used was Pre Experiment with the approach of the One-Group Pre-Post Test Design. The population in this research is the whole pregnant primigravida trimester III in working area Clinics Jagir Surabaya as much as 16 respondents.

Nonprobability sampling techniques using sampling purposive sampling technique. The independent variable in this study is the dependent variable Massage and Endorphin in this study is Anxiety facing labor. The instruments used in this research is the independent variable implementation of Endorphin Massage using protap steps Endorphin Massage and dependent variables measuring the decrease in anxiety facing labor using sheets of sheet-shaped observation, a detailed questionnaire that was available based on measuring HOUSEHOLD (Hamilton Anxiety Rating Scale). Data were analyzed with the statistical test of Wilcoxon Signed Rank Test with significance value of α = 0.05, when α then the hypothesis ρ < research (H1) and (H0) denied that means Endorphin Massage effective against anxiety facing labor on maternal health centers in the region primigravida Jagir of Surabaya.

The Stage Of Data Processing:

a. *Editing*
Is an activity that includes checking the completeness of the identity and the format of the data collection is already good enough in an effort to keep the quality of the data.

b. *Coding*
Classify the observations into categories by giving the code number-shaped sign or on the respective outcome so as to facilitate the processing of data.

c. *Proccessing*
After all the stuffing questionnaire is fully charged and properly, also had passed the pengkodingan, then the next step is to process the data so that it can be analyzed.

d. *Cleaning*

Cleaning (cleaning of data) are checking the data back-entry if there is an error or not.

e. *Tabulating*
The tabulator is a work in crafting the table after the data obtained from the observation sheet and then dicoding. After it is displayed and analyzed.

RESEARCH RESULTS

1. General Data

a. The distribution of respondents according to age

Table 1. Frequency distribution of respondents based on the age of the mother at work-area Clinics Jagir Surabaya January 2017

No	Age (Th)	Frequency (n)	Presentage (%)
1.	17 – 25	2	12,5
2.	26 – 35	14	87,5
3.	36 – 45	0	0
	Total	16	100

Source: Primary Data, February 2017

Based on table 5.1 shows that of the 16 respondents that almost all of the 14 respondents (87.5%) aged 26 – 35 years i.e. early adult life.

b. Gestational age

Table 2. Frequency distribution of respondents based on gestational age at work-area Clinics Jagir Surabaya January 2017

No	Gestational age (Weeks)	Frequency (n)	Presentage (%)
1.	28 – 32	12	75,0
2.	33 – 36	4	25,0
3.	37 – 40	0	0
	Total	16	100

Source: Primary Data, February 2017

Based on table 5.2 shows that of the 16 respondents most respondents (12%) the age of her pregnancy is 75.0 28 – 32 weeks.

c. Characteristics of the respondents based on group work

Table 3. Frequency distribution of respondents based on the characteristics of work in the working area Clinics Jagir Surabaya January 2017

No	Jobs	Frequency (n)	Presentage (%)
1.	Housewife	5	31,3
2.	Private	9	56,3
3.	Self employed	2	12,5
4.	Civil servant	0	0
	Total	16	100

Source: Primary Data, February 2017

Based on table 5.3 show that of the 16 respondents most respondents (56.3%) 9 worked as private employees.

d. Implementation of the Endorphin Massage

Table 4. Frequency distribution of respondents based on their regularity do Endorphin Massage Clinics in the region of Surabaya Jagir January 2017

No	Regularity carried Endorphin Massage	Frequency (n)	Presentage (%)
1.	Very Good	13	81,3
2.	Good enough	3	18,8
3.	Less Good	0	0
	Total	16	100

Source: Primary Data, February 2017

Based on table 5.4 show that of the 16 respondents nearly all 13 (81.3%) respondents expressed very well in doing Endorphin Massage.

2. The specific Data
a. Anxiety level Distribution based HARS (Hamilton Anxiety Rating Scale) of respondents before given the Endorphin Massage.

Table 5.5 Frequency distribution of respondents based on the level of anxiety facing labor before given the Endorphin Massage Clinics in the region of Surabaya Jagir January 2017

No	The Level Of Anxiety	Frequency (n)	Presentage (%)
1.	There is no anxiety	0	0
2.	Mild anxiety	2	12,5
3.	The anxiety is being	4	25,0
4.	Anxiety weight	10	62,5
	Total	16	100

Source: Primary Data, February 2017

Based on table 5.5 shows that of the 16 respondents most respondents (62.5%) 10 in weight anxiety level before given the Endorphin Massage.

b. Distribution based HARS levels of anxiety (Hamilton Anxiety Rating Scale) of respondents having rendered Endorphin Massage.

Table 5.6 Frequency distribution of respondents based on the level of anxiety facing labor after being given Endorphin Massage in working area Clinics Jagir Surabaya January 2017

No	The Level Of Anxiety	Frequency (n)	Presentage (%)
1.	There is no anxiety	0	0
2.	Mild anxiety	15	93,8
3.	The anxiety is being	0	0
4.	Anxiety weight	1	6,3
	Total	16	100

Source: Primary Data, February 2017

Based on table 5.6 shows that of the 16 respondents nearly all 15 respondents (93.8%) in the mild level of anxiety after given Endorphin Massage.

c. The effectiveness of Endorphin Massage against a decrease in levels of anxiety are facing labor on maternal health centers in the region primigravida Jagir of Surabaya.

Table 7. Frequency distribution levels of anxiety are facing labor based on the scale of HARS (Hamilton Anxiety Rating Scale) before being given the Endorphin Massage and after given the Endorphin Massage Clinics in the region of Surabaya Jagir January 2017

No	The Level Of Anxiety There is no anxiety	Pre-Test		Post-Test	
		Frequency (n)	Presentage (%)	Frequency (n)	Presentage (%)
1.	Mild anxiety	0	0	0	0
2.	The anxiety is being	2	12,5	15	93,8
3.	Anxiety weight	4	25,0	0	0
4.	The Level Of Anxiety	10	62,5	1	6,3
	Total	16	16	100	16
	Uji statistic Wilcoxon sign rank test Asymp Sig (2-tailed) Negative rank Positive rank Ties	= = = =	0,001 13 0 3		

Source: Primary Data, February 2017
*Description: α = 0.05 on Meaningful

Based on table 5.7 indicates that of the 16 respondents before (pre) Endorphin Massage most of 10 respondents (62.5%) is at a severe level of anxiety, and after being given (post) Endorphin Massage almost all 15 respondents (93.8%) is at a level of anxiety.

Test results from the descriptive statistics Wilcoxon Sign Rank Test note test post value is smaller than the value of the pre-wedding test turns out to have a value of 13 means that there were 13 respondents experienced a drop in Endorphin levels of anxiety after the Massage and the value of the post test is greater than the value of the pre-wedding test turns out to have a value of 0 means there are no respondents who experienced an increased level of anxiety after the Endorphin Massage , as well as the value of pre test post test value equals turned out to have a value of 3 means that as many as 3 respondents who experienced anxiety remains both before and after given the Endorphin Massage.

Based on the results of the statistical test of Wilcoxon Signed Rank Test with SPSS for Windows with a level of significance of α = 0.05 ρ value obtained = 0.001 and α = 0.05. Therefore ρ < α (0.001 < 0.05) then H0 is rejected and accepted meaning H1 Endorphin Massage effective against anxiety facing labor on maternal health centers in the region primigravida Jagir of Surabaya.

DISCUSSION
1. The level of Anxiety Facing Labor on mother Primigravida Before given the Endorphin Massage (pre test)

The results in table 5.5 shows that prior to Endorphin Massage obtained data from 16 respondents most respondents 10 (62.5%) experienced severe anxiety. Anxiety can also be heavily influenced by the work of a person. As shown in table 5.3 is obtained that third trimester primigravida mothers of 16 respondents obtained 5 respondents (31.3%) as housewives, 9 respondents (56.3%) as private employees, and 2 respondents (12.5%) other work as self-employed. The majority of respondents (56.3%) 9 has a job as a private employee that is working in a factory with a very heavy workload and on target. It can also affect the mother's psychological condition.

It is supported by the theory according to Nixon Manurung (2016), that anxiety can also be influenced by some factors such as that is the environment. About residence environment or affect the way of thinking of the individual. About yourself as well as others. This is caused due to an unpleasant experience in individuals with family atupun, the friend of a co-worker. So that individuals feel insecure to the environment (Nixon Manurung, 2016).

From the results of the HOUSEHOLD questionnaire (Hamilton Anxiety R ating Scale) data that has been obtained, all the respondents who felt the weight of anxiety symptoms as follows, that bad feeling, feeling tense, irritable, unable to break with sleep, feeling sad, easy sweating, dry mouth, agitation and cannot calm down, it's easy to cry, hard to start no sleep, sleep sleep and often woke up at night, as well as the stiff muscles.

Severe anxiety felt by the respondent as it is the first experience, so feel less prepared childbirth resulting in a sense of worry and anxiety perasaaan occurred. Anxiety facing labor is common felt by

pregnant women especially on mother primigravida. Anxiety was felt because of the fear of labor, fear of going to something with a baby who will be born, childbirth complications when worried, and scared because of pain during labor.

Hal ini sependapat oleh Yessie A (2010) It is agreed by Yessie A (2010) that a pregnant woman, let alone a primigravida (first time pregnant) almost everything experienced worries, anxiety and fear in the face of labor. Anxiety was felt generally range from concerned could not keep the pregnancy so that the fetus can't grow perfectly, fear of pain, fear of childbirth when later stitched, even more extreme to mention they fear complications at the time of labor so that it can menimbulakan death (Yessie A, 2010).

2. The level of Anxiety Facing Labor on mother Primigravida After given the Endorphin Massage (post-test)

The result of research from table 5.6 indicates that levels of anxiety after given the Endorphin Massage almost all 15 respondents (93.8%) experienced a mild anxiety. From the results of the HARS questionnaire (Hamilton Anxiety Rating Scale) obtained data that, almost all the respondents who experienced mild anxiety to feel symptoms as follows, namely frequent urination and may not hold pee, afraid to be left alone, easy sweating, and feeling fickle, and does not occur in muscle stiffness.

Respondents having rendered his body Massage is becoming more Endorphin is relaxed and comfortable, can sleep soundly, muscles become stiff and the feeling tired in the body decreases. Because after being given a massage this light through the surface of the skin, the body will automatically dispense the hormone endorphin. The more endorphin hormone production in the body then reduced the perceived anxiety. Because the hormone endorphin has many benefits including the following: namely, to relieve pain, and get rid of stress. So when given the Endorphin therapy Massage, the body will be more relaxed and comfortable. With the condition of the body relaxed and comfortable so that it can reduce the perceived anxiety.

It is also supported on the basis of the theory according to Yesie A (2010), that Endorphin Massage a light touch is a method used to manage pain. This technique can be used to reduce any discomfort during the process of labor and increase relaxation with trigger a feeling of comfort through the surface of the skin (Rizema s. p., 2016). During this time, endorphins were known as substances that many benefits, some of which is to organize the production of growth hormone and sex, control pain as well as pain that settled, control feelings of stress and improves the immune system (Kuswandi L, 2014).

This research was supported by the opinion of the Anik (2010), stating that labor faced the anxiety can be overcome in many ways, one of them using a non pharmacological therapy. Non pharmacological therapy is done with the use of massage. Massage that is often used for labor such as Endorphin Massage (Anastasya H, 2009). In general this massage to relieve pain on a mother who will give birth, so with a decreased pain then it can lower the mother's anxiety in the face of labor.

3. Effectiveness of Endorphin Massage against the level of anxiety facing labor on maternal health centers in the region primigravida Jagir Surabaya

Based on table 5.7 indicates that of the 16 respondents before (pre) Endorphin Massage most of 10 respondents (62.5%) is at a severe level of anxiety, and after being given (post) Endorphin Massage almost all 15 respondents (93.8%) is at a level of anxiety.

Based on the results of a test of Wilcoxon Sign Rank test statistic Test using SPSS for Windows with a level of significance of $\alpha = 0.05$ ρ value obtained = 0.001 and $\alpha = 0.05$. Therefore $\rho < \alpha$ ($0.001 < 0.05$) then H0 is rejected and accepted meaning H1 Endorphin Massage effective against anxiety facing labor on maternal health centers in the region primigravida Jagir of Surabaya.

Based on the above data it can be concluded that Endorphin Massage is effective in lowering levels of anxiety are facing labor. Of the 16 respondents Endorphin

therapy Massage given before, most of the 10 respondents (62.5%) experienced severe anxiety. Severe anxiety felt by the respondent could bring the following symptoms, i.e., bad feeling, feeling tense, irritable, unable to break with sleep, feeling sad, easy sweating, restless and uneasy dry mouth, easily crying, hard to start no sleep, sleep sleep and often woke up at night, as well as the stiff muscles. And from 16 respondents after the Endorphin therapy Massage is given, almost all 15 respondents (93.8%) experienced a mild anxiety. Mild anxiety felt by the respondent could bring the following symptoms i.e. frequent urination and may not hold pee, afraid to be left alone, easy sweating, and feeling fickle, and does not occur in muscle stiffness.

From the data above, it can be concluded that there are no gajala reappear after a given therapy Endorphin Massage. All the symptoms are felt not all missing so only when respondents were given therapy Endorphin Massage. It is affected due to the regularity of do Endorphin Massage. In table 5.4 is obtained data that of 16 respondents, only 13 respondents who do Endorphin Massage very well, respondents do so in accordance with the time recommended by researchers i.e. 1 times a day for 14 days with a frequency of 20 minutes. And 3 other respondents do Endorphin Massage pretty well, the respondents did not do Endorphin therapy Massage with a time that was already determined by the researchers. So of the 16 respondents, 13 respondents did not have elevated levels of anxiety after the Endorphin therapy Massage is given. And 3 other respondents experiencing anxiety with the same level, both before and after the given Endorphin Massage.

According to Kuswandy L (2014) who points out that when the Endorphin Massage done then the body will release endorphin which is a compound pain reliever, and can create a feeling of comfort. To remove a sense of worry and anxiety is excessive explisit Endorphin therapy Massage regularly. The technique of this massage endorphin should be controlled by both partners, both the pregnant mother and her husband. This technique can also help strengthen the bond between husband and wife in preparing for childbirth (Aprillia Y, 2010).

SUMMARY AND ADVICE
A. Conclusions
From the results of research undertaken researchers, then researchers concluded a few things as follows.
1. Primigravida expectant mothers in the region largely Surabaya Jagir of clinics experiencing severe anxiety prior to Endorphin Massage.
2. Pregnant women Seek Employment in the territory of Primigravida Jagir Surabaya mostly mild anxiety after Endorphin Massage.
3. Massage is effective in lowering the Endorphin levels of anxiety are facing labor on maternal health centers in the region primigravida Jagir of Surabaya.

B. Suggestions
1. For practitioners
This research can provide additional science in disciplines of nursing maternitas of anxiety facing labor primigravida mothers in particular on ways of handling the anxiety of facing non farmkologis in childbirth.
2. For institutions
This research can provide additional science in disciplines of nursing maternitas about handling non pharmacological basis is to use Endorphin Massage to reduce the level of kecmaasan the face of labor in primigravida mothers.
3. For health centers
a. Research this can be a helpful reference for clinics add amenities such as room for the Endorphin Massage, moreover also can add to the income of clinics.
b. Expected After done this research can be used as input to the health centers in providing information about handling the anxiety of facing labor by doing Endorphin Masage.
4. For the respondent
For respondents who experienced anxiety face a labor preferably dealt with how to use the non pharmacological therapy, i.e. using Endorphin Massage.

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