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# ENDORPHIN MASSAGE AGAINST PAIN INTENSITY AND ANXIETY LEVELS IN PRIMIGRAVIDA MATERNITY MOTHERS DURING 1 ACTIVE PHASE

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#### ABSTRAK : PIJAT ENDORPHIN TERHADAP INTENSITAS NYERI DAN TINGKAT KECEMASAN PADA IBU BERSALIN PRIMIGRAVIDA SELAMA 1 TAHAP AKTIF

Latar Belakang : Proses persalinan identik dengan rasa nyeri yang akan dijalani. Ibu hamil sering merasa cemas dan khawatir tentang rasa nyeri yang akan mereka alami saat melahirkan dan akan bereaksi untuk mengatasi nyeri dan kecemasan tersebut.

Tujuan : Penelitian ini untuk mengetahui pengaruh *Endorphin Massage* terhadap intensitas nyeri dan tingkat kecemasan pada ibu bersalin primigravida kala 1 fase aktif pada kelompok intervensi dan kelompok kontrol.

Metode : Desain penelitian Eksperimen semu (Quasi Eksperimental) ini menggunakan rancangan Pre-test Post-test Two Group Design. Populasi dari penelitian ini berjumlah 40 responden ibu bersalin primigravida kala 1 fase aktif. Sampel penelitian 20 responden kelompok intervensi dan 20 responden kelompok kontrol dengan Purposive Sampling. Instrumen penelitian berupa Kuesioner dan alat ukur Numerik Rating Scale (NRS) dan Hamilton Anxiety Rating Scale (HARS). Distribusi data sudah dilakukan uji normalitas dengan hasil data terdistribusi normal. Analisis data dengan pengujian hipotesis menggunakan uji t- test Independent dan uji paired simple t- test.

Hasil : Penelitian menunjukkan ada perbedaan yang signifikan rata-rata inntensitas nyeri dan tingkat kecemasan antara ibu bersalin primigravida kala 1 fase aktif yang diberikan *Endorphin Massage* dan yang tidak diberikan *Endorphin Massage* pada ibu bersalin sebesar 0,000 (*p*<0.05).

Kesimpulan : Ada pengaruh pemberian metode *endorphin massage* terhadap intensitas nyeri dan tingkat kecemasan pada ibu bersalin primigravida kala 1 fase aktif untuk menekan rasa sakit dan kecemasan ibu bersalin.

Saran : Diharapkan dapat memotivasi tenaga kesehatan untuk menggunakan atau mengkombinasikan terapi farmakologi maupun non farmakologi dapat digunakan sebagai salah satu bentuk intervensi dalam memberikan asuhan kebidanan secara komprehensif salah satunya metode *Endoprhin Massage* 

Kata Kunci : Endorphin Massage, nyeri, kecemasan, persalinan.

# ABSTRACT

Background: The process of childbirth is identical to the pain that will be endured. Pregnant women often feel anxious and worried about the pain they will experience during childbirth and will react to deal with the pain and anxiety.

Purpose: This study was to determine the effect of Endorphin Massage on pain intensity and anxiety levels in primigravida maternity mothers in active phase 1 in the intervention group and the control group.

Methods: This quasi-experimental (quasi-experimental) research design uses a Pre-test Post-test Two Group Design. The population of this study amounted to 40 respondents who gave birth to primigravida in the first active phase. The research sample was 20 respondents in the intervention group and 20 respondents in the control group using purposive sampling. The research instruments were questionnaires and measuring instruments, the Numerical Rating Scale (NRS) and Hamilton Anxiety Rating Scale (HARS). The distribution of the data has been tested for normality with the results of the data being normally distributed. Data analysis by hypothesis testing using Independent t-test and paired simple t-test.

Results: The study showed that there was a significant difference in the average pain intensity and anxiety level between primigravida mothers in active phase 1 who were given Endorphin Massage and those who were not given Endorphin Massage were 0.000 (p<0.05).

Conclusion: There is an effect of giving the endorphin massage method on the intensity of pain and anxiety levels in primigravida maternity mothers in active phase 1 to suppress pain and anxiety in childbirth.

Suggestion: It is hoped that it can motivate health workers to use or combine pharmacological and non-pharmacological therapies that can be used as a form of intervention in providing comprehensive midwifery care, one of which is the Endoprhin Massage method.

Keywords: Anxiety, Childbirth ,Endorphin Massage, Pain,

# INTRODUCTION

Childbirth is the process by which the baby, placenta and amniotic membrane come out of the mother's uterus, normal delivery occurs at a gestational age of enough months / after gestational age of 37 weeks or more without complications. At the end of pregnancy the mother and fetus prepare themselves to face the labor process. The fetus grows and develops in the process of preparation for life outside the womb (Fauziah, 2017). The process of childbirth is synonymous with the pain that will be lived. Pregnant women often feel anxious and worried about the pain they will experience during childbirth and will react to overcome the pain. Labor pain during 1 primigravida occurs due to the process of cervical changes (thinning and dilatation), uterine ischemia, as well as a decrease in the lowest part of the fetus. The labor process experienced is the first experience that causes anxiety and fear to aggravate pain (Syaiful and Fatmawati, 2020).

The majority of primigravida respond to pain with fear and anxiety resulting in the activity of the sympathetic nervous system, as well as increasing the secretion of catecholamines (epinephrine and norepinephrine). This hormone can cause the occurrence of smooth muscle tension and vasoconstriction of blood vessels. So it can result in a decrease in uterine contractions, a decrease in uteroplacental circulation, a reduction in blood and oxygen flow to the uterus, as well as the onset of uterine ischemia that makes pain impulses multiply. As well as causing disturbances in the strength of the uterus so that uterine inertia occurs. If not overcome, it will cause the occurrence of old partus. which can cause complications in the mother and fetus including maternal death and asphyxia in the fetus (Syaiful and Fatmawati, 2020).

Pain during childbirth can cause blood pressure to increase and the mother's concentration during childbirth to be disturbed, it is not uncommon for pregnancy to bring "stress" or worry / anxiety that has an impact and influence on the physical and psychic, both on the mother and on the fetus she contains. For example, resulting in physical disability and deterioration of intelligence as well as mental emotional pain and excessive pain will cause anxiety. Excessive anxiety also adds to pain (Syaiful and Fatmawati, 2020). Excessive anxiety also adds to pain (Syaiful and Fatmawati, 2020). With a high level of anxiety and not in line with life, if it lasts continuously for a long time there can be fatigue causing death (Mardjan, 2016).

According to the World Health Organization (WHO) the results of research in the United States show that 70% to 80% of patients expect the delivery to take place painlessly. Currently in developing countries 20% to 50% of deliveries in hospitals are carried out with Sectio caesaria (SC) (Alam, 2020). Based on the health profile in 2019 the number of maternal deaths according to West Java Province in 2018-2019 there was a decrease from 4.226 to 4.221 maternal deaths in Indonesia. In 2019 the most common causes of maternal death were bleeding (1,280 cases), hypertension in pregnancy (1,066 cases), infection (207 cases) (Ministry of Health R.I, 2020). The number of maternal deaths in 2019 based on the reporting of the District/City Health Profile in West Java Province was 684 cases or 74.19 per 100,000 Live Births, a decrease of 16 cases compared to 2018, which was 700 cases. The cause of maternal death is still dominated by 33.19% bleeding, 32.16% hypertension in pregnancy, 3.36% infections, 9.80% circulatory system (heart) disorders, 1.75% % metabolic disorders and 19.74% other causes. Based on the Bekasi City Health Profile, the maternal mortality rate (MMR) in 2019 was 22 per 100,000 Live Births (Dinkes Jawa Barat 2019).

One way to reduce the Maternal Mortality Rate (MMR) is through the maternal affection movement which is an aspect of the 5 common threads to help mothers feel safe and comfortable during the delivery process. The application of maternal care during period 1 that can be done is family assistance, relaxation, breathing, nutritional diet and movement / position change. Various efforts were made to overcome labor pain, namely nonpharmacologically. In the form of alternatives, one of which is Massage, can increase body relaxation and reduce stress, besides that massage is an effective, safe, simple and does not cause adverse effects on both the mother and the fetus (Kurniati, 2017).

One of the ways of nonpharmacological management to overcome labor pain and anxiety can be done with the Endorphin Massage method (Alam, 2020). Endorphin Massage is a touch technique as well as a light massage, which can normalize heart rate and blood pressure, as well as improve the relaxed condition in the pregnant woman's body by triggering a feeling of comfort through the surface of the skin. An obstetrician, Constance Palinsky, was moved to use endorphins to reduce or relieve pain in mothers who are about to give birth (Deswani et al., 2018).

Research conducted previously by Leny and Machfudloh (2017) "Endorphin Massage Therapy To Reduce Pain Intensity During 1 Active Phase of Labor" that the Endorphin Massage method is able to reduce the intensity of pain during 1 active phase. And respondents felt the change after the massage was more relaxed and more comfortable. One of the ways of nonpharmacological management to overcome labor pain and anxiety can be done with the Endorphin Massage method (Alam. 2020). Endorphin Massage is a touch technique as well as a light massage, which can normalize heart rate and blood pressure, as well as improve the relaxed condition in the pregnant woman's body by triggering a feeling of comfort through the surface of the skin. An obstetrician, Constance Palinsky, was moved to use endorphins to reduce or relieve pain in mothers who are about to give birth (Deswani et al., 2018). Research conducted previously by Leny and Machfudloh (2017) "Endorphin Massage Therapy To Reduce Pain Intensity During 1 Active Phase of Labor" that the Endorphin Massage method is able to reduce the intensity of pain during 1 active phase. And respondents felt the change after the massage was more relaxed and more comfortable.

Based on the results of the preliminary survey, from the results of interviewing 3 midwives at rsud dr. Chasbullah A.M Kota Bekasi, it turns out that no one has ever given Endorphin Massage therapy to maternity mothers, especially in primigravida maternity mothers during 1 active phase.

Based on this background, researchers are interested in conducting research on "The Effect of Endorphin Massage on Pain Intensity and Anxiety Levels of Primigravida Maternity Mothers During 1 Active Phase at Dr. Chasbullah A.M Hospital, Bekasi City in 2021 The research design in this study is Quasi Experimental (Quasi Experimental). With the Pretest Post-test Two Group Design approach, it uses two groups that will be the subject of the study, one is given an intervention (experimental group) and the other is not given an intervention (control group).

The group that was the subject of the study (respondents) was maternity mothers who experienced pain and anxiety at the time of going into labor and were given Endorphin Massage. And respondents took measurements of pain scales & anxiety levels before being given an intervention (Pre-test). Respondents were given an Endorphin Massage intervention for 15 minutes and then a maternal pain & anxiety scale was measured (Posttest).

Sampling of 40 samples was carried out by purposive sampling by determining samples according to the criteria of inclusion and exclusion. The instruments used in this study were in the form of questionnaires and measuring instruments Numerical Rating Scale (NRS) and Hamilton Anxiety Rating Scale (HARS).

Research analysis consists of univariate and bivariate analysis, before hypothesis testing is carried out a normality test which is one of the test requirements for data analysis. To find out the distribution of data has a normal distribution or not. Normality test with one sample kolmogrov-smirnov method was used for data size samples of 20-1000 samples (Gunawan, 2018). If the data is normally distributed, an independent parametric t-test and a paired sample t-test are used.

# RESULTS AND DISCUSSION Univariate Analysis

Univariate analysis was performed to determine the average value of pain and anxiety intensity in primigravida maternity mothers during 1 active phase before and after endorphin massage administration in the intervention group and control group

Based on Table 1, it is known that the average value of maternal pain intensity before endorphin massage was given in the intervention group was 6.60, with the lowest pain value of 4 and the highest pain value of 10. The average value of maternal pain intensity after endorphin massage was given in the intervention group was 5.15, with the lowest pain value of 3 and the highest pain value of 9 with a mean difference of -1.45. Meanwhile, the average value of maternal pain intensity before being given intervention in the control group was 6.65, with the lowest pain value

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of 4 and the highest value of 9. The average value of maternal pain intensity after in the control group

was 6.30, with the lowest pain value of 3 and the highest value of 9 with a mean difference of -0.35.

label 1
Average Distribution of Pain Intensity in Primigravida Maternity Mothers During 1 Active Phase Before
and After Endorphin Massage Administration in Intervention Groups and Control Groups

Intensitas	Pre-Test				Selisih		
Nyeri	Mean	Min	Max	Mean	Min	Max	Mean
Intervensi	6,60	4	10	5,15	3	9	-1,45
Kontrol	6,65	4	9	6,30	3	9	-0,35

Tab	el 2

Average Distribution of Anxiety Levels In Primigravida Maternity Mothers During 1 Active Phase Before and After Administration of Endorphin Massage In Intervention Groups and Control Groups.

Tingkat	Pre-Test			Post-Test			Selisih
Kecemasan	Mean	Min	Max	Mean	Min	Max	Mean
Intervensi	35,15	20	51	27,60	16	41	-7,55
Kontrol	36,50	25	55	35,40	20	53	-1,1

Based on Table 2. It was found that the average value of the anxiety level of maternity mothers before being given endorphin massage in the intervention group was 35.15, with the lowest anxious score of 20 and the highest anxious value of 51. The average value of the anxiety level of maternity mothers after being given endorphin massage in the intervention group was 27.60, with the lowest anxious value of 16 and the highest anxious value of 41 with a mean difference of -7.55. Meanwhile, the average value of the anxiety level of maternity mothers before being given intervention in the control group was 36.50, with the lowest anxious score of 25 and the highest score of 55. The average value of the anxiety level of maternity mothers after in the control group was 35.40, with the lowest anxious score of 20 and the highest value of 53 with a mean difference of -1.1

Pain can stimulate the respiratory system and cause periods of hyperventilation, if oxygen administration is not adequate it can cause hypoxemia of the mother and fetus (Rehatta et al, 2019). Labor pain, anxiety and stress increase the release of gastrin and inhibit gastrointestinal motility and reflex urination, which leads to an increase in the volume and acidity of the stomach. When feeling anxious the individual feels discomfort or fear, in the process of anxiety a person experiences physiological changes in his body, such as trembling, sweating, increased heart rate, as well as followed by psychological changes, such as panic, tension, confusion and difficulty concentrating (Hidayat, 2021).

The results of this study are in line with the research conducted by Leny and Machfudloh (2017) "Endorphin Massage Therapy to Reduce the Intensity of Pain During 1 Active Phase of Labor" showed that out of 20 respondents some experienced very pain and severe pain before doing Endorphin Massage as many as 19 people (95%), after Endorphin Massage decreased to moderate pain as many as 14 people (70%) and 3 people (15%) experienced a decrease from a very painful scale to severe pain, and there were 3 people (15%) who did not experience changes (severe pain). That the endorphin massage method is able to reduce the intensity of pain during 1 active phase. And respondents felt the change after the massage was more relaxed and more comfortable.

According to the respondent's statement before being given endorphin massage therapy respondents had difficulty sleeping, palpitations, sweating due to feeling labor pains. Mom will feel more restless, uncomfortable and traumatized. Pain and anxiety will increase until the labor process takes place. Labor pain is personal because everyone perceives different pains against the stimulus depending on the pain threshold they have. Based on the assumptions of endorphin massage researchers are very effective for treating pain and anxiety at the time of delivery. Maternity mothers need to prepare from pregnancy to delivery so that mothers can distract from pain and anxiety, by adjusting their breath and relaxing. Thus the pain and anxiety will be resolved so that it is unsustainable and getting heavier which can affect

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the physical and psychological aspects of the mother and fetus.

#### **Bivariate Analysis**

 
 Tabel 3

 Average Difference in Endorphin Massage Against Pain Intensity and Anxiety Levels of Primigravida Maternity Mothers During 1 Active Phase After In Intervention Groups and Control Groups.

Variabel	Mean	SD	Std. Error Mean	P-Value	Mean Difference	
Nyeri (post-test) Intervensi	5,15	2,059	0,460	0.005	1 150	
Nyeri (post-test) Kontrol	6,30	2,055	0,459	0,085	-1,150	
Kecemasan (post-test) Intervensi	27,15	8,816	1,971	0.011	0.050	
Kecemasan (post-test) Kontrol	35,40	10,520	2,352	0,011	-8,250	

Based on Table 3. It is known that the average (mean) pain intensity score (Post-Test) of the intervention group was 5.15, for the control group it was 6.30. Descriptively, statistics can be concluded that there was a slight difference in the pain outcomes of the intervention group with controls. Based on the value of Sig. Levene's Test for Equality of Variances of 0.912 > 0.05. The value of Sig. (2-tailed) was 0.085 < 0.05 then in the independent sample t-test it can be concluded that H0 is rejected and Ha is accepted. There was a significant (noticeable) difference between the posttest maternal maternity pain in the intervention group and the control group. Mean Difference of -1.150 difference between mean post-test pain in the intervention group with control group of 5.15 minus 6.30 = -1.150 and difference of -2.467 to 0.167(95% Confidence Interval of the Difference Lower Upper

The average (mean) anxiety level score (Post-Test) of the intervention group was 27.15, for the control group of 35.40. Descriptively statistics can be concluded there is a difference in the average anxiety outcomes of the intervention group with the controls. Based on the value of Sig. Levene's Test for Equality of Variances of 0.124 > 0.05. The value of Sig. (2-tailed) of 0.011 < 0.05 then it can be concluded that H0 is rejected and Ha is accepted. There was a significant (noticeable) difference between the post-test of maternity anxiety in the intervention group and the control group. Mean Difference of -8.250 difference between mean post-test anxiety in the intervention group with the control group of 27.15 minus 35.40 = -8.250 and difference of -14.463 to -2.037 (95% Confidence Interval of the Difference Lower Upper). The average (mean) anxiety level score (Post-Test) of the intervention group was 27.15, for the control

group of 35.40. Descriptively statistics can be concluded there is a difference in the average anxiety outcomes of the intervention group with the controls. Based on the value of Sig. Levene's Test for Equality of Variances of 0.124 > 0.05. The value of Sig. (2-tailed) of 0.011 < 0.05 then it can be concluded that H0 is rejected and Ha is accepted. There was a significant (noticeable) difference between the post-test of maternity anxiety in the intervention group and the control group. Mean Difference of -8.250 difference between mean posttest anxiety in the intervention group with the control group of 27.15 minus 35.40 = -8.250 and difference of -14.463 to -2.037 (95% Confidence Interval of the Difference Lower Upper).

This is in accordance with the theory of Aprillia (1017) that Endorphin massage therapy can secrete endorphin hormones that serve to increase comfort and reduce pain. This massage can stimulate the body to release endorphin compounds which are pain relievers and can create a feeling of comfort. There are several benefits of this endorphin massage such as: regulating growth and sex hormones, controlling persistent pain and pain, controlling feelings of frustration and stress, improving the immune system.

The results of this study are in accordance with the results of Arianti and Restipa's (2019) research on "The Effect of Endorphin Massage on the Anxiety Level of Primigravida Mothers" showing that the average value of the level of anxiety in the experimental group was 0.667 while the average level of anxiety in the control group was 0.267. Stated that the average level of anxiety in the experimental group was higher than the average level of anxiety in the control group.

This research is the same as the research of Maesaroh et al., (2019). About "The effect of

endorphin massage on the anxiety level of multipara maternity mothers 1". That there was a decrease in the average anxiety level of multipara maternity mothers during the 1st active phase before and after being given endorphin massage was from 13.71 to 5.21 which means from mild anxiety levels close to moderate to no anxiety close to mild anxiety. The p-value < 0.05 means that Ha is accepted. There is an influence between the level of anxiety of multipara maternity mothers during the 1st active phase before and after being given endorphin massage in the Work Area of the Rantau Tijang Kecematan Pugung Puskemas, Tanggamus Regency in 2019.

Based on the researcher's assumption that the endorphin massage technique can also give individuals self-control when there is discomfort or anxiety, physical and emotional stress caused by excessive pain and anxiety.

## Table 4

#### Paired Sample T-Test Results Effect of Endorphin Massage Method on Pain Intensity in Primigravida Maternity Mothers During 1 Active Phase Before and After at dr. Chasbullah A.M Bekasi City Hospital in 2021

Pair 1	Mean -		Paired Differen		Sig. (2-	
		SD	Std. Error Mean	Mean Difference	τ	tailed)
Pre-Test	6,60	0 605	0 125	1,450	6.085	0.000
Post-Test	5,15	0,605	0,135	1,400	0,005	0,000

Based on Table 4. The results of statistical analysis using the Paired Sample T-Test obtained a difference index difference index (t) calculated large 6.085 with a Sig, (2-tailed) value of 0.000 < 0.05then H0 was rejected and Ha was accepted. It can be concluded that there is an average difference between the results of the pain pre-test and the post-test. This means that there is an influence of endorphin massage pain intensity in primigravida maternity mothers during 1 active phase. The Mean Paired Differences value of 1.450 is the average difference between the endorphin massage results against the pre-test with a post-test of 6.60 minus 5.15 = 1.45 and the difference between 1.167 and 1.167.

In accordance with the theory of Aprillia (2010) when you feel the pain of hormone stress will be aroused out and flow through the body naturally the body will release endorphin hormones, pain relief hormones or natural pain killers that are able to cause a sense of comfort and relaxation.

The results of this study are in accordance with the research of Khasanah and Sulistyawati (2020) on "The Effect of Endorphin Massage on

Pain Intensity in Maternity Mothers" that the results of statistical tests analyzing the effect of endorphin massage on the intensity of labor pain obtained a significant value of 0.000 (P < 0.05), namely the effect of endorphin massage on reducing pain intensity in mothers at time 1

Similarly, the results of a study by Leny and Machfudloh (2017) "Endorphin Massage Therapy to Reduce Pain Intensity During 1 Active Phase of Labor" showed that there was an influence of endorphhin's massage therapy on the intensity of pain during the I active phase of labor, namely obtaining results of p < 0.05, namely p = 0.004, concluded the intensity of pain respondents before endorphin massage experienced severe pain, and respondents who were done endorphin massage experienced moderate pain.

Based on the researchers' assumption, endorphin massage therapy is very safe to give to patients who experience labor pain, which can suppress pain and discomfort by doing a gentle touch on the mother's body for 15 minutes so that it is effective for overcoming the pain.

# Table 5

Paired Sample T-Test Results Effect of Endorphin Massage Method on Anxiety Levels in Primigravida Maternity Mothers During 1 Active Phase Before and After at dr. Chasbullah A.M Hospital, Bekasi City in 2021

Pair 1	Mean -		Paired Differen	4	Sig. (2-	
		SD	Std. Error Mean	Mean Difference	τ	tailed)
Pre-Test	35,15	5,549	1,241	7,550	10.722	0,000
Post-Test	27,60				10,722	0,000

Based on Table 5. The results of statistical analysis using Paired Sample T-Test obtained an index of difference index difference (t) calculated large 10,722 with a Sig, (2-tailed) value of 0.000 < 0.05 then H0 was rejected and Ha was accepted. It can be concluded that there is an average difference between the results of the anxiety pretest and the post-test. This means that there is an influence of endorphin massage anxiety levels in primigravida maternity mothers during 1 active phase at dr. Chasbullah Hospital, Bekasi City, A.M. Bekasi City in 2021. The Mean Paired Differences value of 7,550 is the average difference between the results of endorphin massage against the pretest with a post-test of 35.15 minus 27.60 = 7.55and the difference between 4.953 and 10.147.

In accordance with the theory of Aprillia (2017) endorphin massage aims to stimulate the production of endorphin hormones that serve to increase comfort and reduce pain. With touch and massage that stimulates the body to release endorphin compounds which are pain relievers and can create a feeling of comfort.

The results of this study are in accordance with the research of Arianti and Restipa (2019) on "The Effect of Endorphin Massage on the Anxiety Level of Primigravida Mothers" shows that the Paired Sample T-Test test. Based on the t-test, a significant p-value of 0.003 (p<0.05) was obtained so that the hypothesis in this study was accepted. This means that there was a significant level of anxiety in the experimental group before and after being given endorphine massage

This study is in accordance with Meihartati Mariana's (2018) research and on "The Effectiveness of Endorphin Massage Against The Anxiety Level of Primipara Kala Maternity Mothers 1 Active Phase" stated that the results of the study with the Wilcoxon test obtained a p-value of < 0.05(0.003) meaning that there is an effectiveness of endorphin massage on the anxiety level of active phase primiparous mothers. Based on the assumptions of researchers, pregnant women need to gain knowledge about the endorphin massage method in preparing for the delivery process. With a touch and a smooth and gentle massage towards the moment of delivery can give the mother a calming and comfort effect. And can make heart rate and blood pressure normal so that mothers feel more relaxed.

# CONCLUSION

Based on the results of data analysis, researchers can draw several research conclusions

as follows: there is an effect of giving endorphins massage before and after of 0.000 < 0.05 on the intensity of pain and anxiety levels of primigravida maternity mothers during 1 active phase at dr. Chasbullah A.M Hospital, Bekasi City in 2021.

## SUGGESTION

Endorphin Massage. Advice for pregnant women is expected to add information about the importance of the Endorphin Massage method to reduce the intensity of pain and anxiety levels during the delivery process, so that maternity mothers can undergo childbirth relaxed, comfortable and calm without excessive pain and anxiety, one of which is the Endorphin Massage method.

And for health workers, it can be motivating to use or combine pharmacological and nonpharmacological therapies that can be used as a form of intervention in providing comprehensive obstetric care. For health workers to master various kinds of other non-pharmacological therapies, one of which is to reduce pain and anxiety in maternity mothers during the 1st active phase by providing Endorphin Massage therapy

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