

Oxytocin Massage to Reduce Labour's Pain and Improve the Contraction

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ABSTRACT

Background: Childbirth is a physiological process that makes major changes to the mother to be able to remove her fetus through the birth canal. Every pregnant woman makes sure to crave normal labor and minimal pain. However, for a woman, especially a young mother, the labor process is often something very scary and synonymous with pain. Labor pain is a physiological process, but if the pain is not handled properly it will cause other problems such as increased anxiety or worry so that adrenal hormone production increases and results in vasoconstriction that causes the mother's blood flow to the fetus to decrease. Some nonpharmacological efforts that can be done to reduce pain and accelerate the occurrence of his is with oxytocin massage. The purpose of this study is to describe the effect of oxytocin massage on pain and his inpartu patients. Method:The research method used is literature review by searching for articles related to the theme taken from several search engines namely Pubmed, and Google Scholar and Search is done using the keyword " painful, labour, oxytocin massage, his, contraction, inpartu. Results:The results of this study have an effect of oxytocin massage on pain and his inpartu patients
Conclusion: There is an effect of oxytocin massage on pain reduction and acceleration of contraction.

1. Introduction (*Heading 1*) (bold, 11pt)

This template refers to IEEE conference template and tetrahedron_Letters_template by elsevier, Based on data from the World Health Organization (WHO) 2017 in a day there are four mothers in Indonesia who died after childbirth. In other words, there is one mother in Indonesia who dies every six hours [1]. This figure puts Indonesia at number two highest in Southeast Asia after Laos with a mortality rate of 357 mothers per 100,000 and Indonesia at 305 per 100,000 Maternal mortality factors are preeclampsia (24%), bleeding (28%), infection (11%), old partus (5%), complications (8%), obstetric trauma (3%) [2]. Old partus is one of the causes of maternal and fetal death in Indonesia long labor becomes the fifth cause of maternal death, which is 9%. The old partus will cause the mother dehydration, exhaustion, infection and can even cause bleeding that will result in the death of the mother [1]. Childbirth is a natural process that will be experienced by every woman [3]. The labor process is very important to observe his by looking at the duration of his and his frequency so that the labor process when I will take place normally [4]. In primigravida the length of labor when I has a longer duration compared to multigravida which is about 7 hours. The length of labor when I depends on uterine contractions, the more frequent contractions can speed up the process of delivery. There are several methods that can be used to stimulate contraction both pharmacologically and non-pharmacologically. The use of pharmacological methods has better effectiveness but this method causes unexpected side effects. While nonpharmacological methods in addition to stimulating contractions in the labor process also have a simple, non-insensivous, effective, and harmless effect [5]. In the process of childbirth often makes the mother anxious and synonymous with pain [6]. Labor pain is a physiological process. But pain if not treated properly will cause problems

that include increasing the worry and anxiety of the labor process so that the production of the hormone adrenaline increases and causes vasoconstriction that causes the mother's blood flow to the fetus to decrease [1].

In order not to occur complications of childbirth, oxytocin massage can be done to speed up the labor process so that it does not last long [7]. The importance of oxytocin massage is to help speed up the labor process so that it does not last long and there are no complications of persalianan [1]. Oxytocin massage can be done by families with the assistance of midwives so it is easy to do. In doing oxytocin massage that must be considered so that massage produces optimal influence is the way of massage on each mother with a different posture, such as mothers with thin or normal bodies can use the thumb of the left and right hands or the back of the left and right index fingers while mothers with a fat posture must be massaged with the position of the clenched palms [8]. In addition, the duration of the massage of oxytocin needs to be considered the time to do massage that is for 3-5 minutes [4].

Looking from the background regarding pain and the frequency of his that can cause labor to last a long time so that it can result in death in the mother, oxytocin massage during labor is expected to accelerate the frequency of his so that the labor process becomes faster [9]. Seeing the many benefits obtained by doing oxytocin massage during labor, the author was interested in taking the title of literature review of oxytocin massage against pain and improve the contraction.

2. Materials and Method

The method used is literature review. In the first stage, it begins by searching for articles using PubMed and Google Scholar. The keywords used in the search for articles are oxytosin massage oxytocin massage, childbirth, painfull labour, contraction,inpartu. The articles obtained will be reviewed to obtain articles that meet the predetermined criteria. The inclusion criteria in the search for articles were chosen based on the year of publication, namely the range of 2017-2021 where the subject was maternity mother. The exclusion criteria at the time of the article search were selected according to the research variables, the variables were not compared with other variables. The search was carried out according to keywords and found articles that were close to 35 Selection of subsequent articles was

The journals that have been found are then specified according to the inclusion criteria and exclusion criteria, namely IC1: journal published, IC2: journal published in 2017-2021, IC3: type of quantitative research, IC4: non-duplicate journal published on Google scholar. After conforming to IC1-IC4, only 25 articles were left. Then IC5 was selected based on the compatibility of article titles and abstracts with the aim of this literature review, which is to have the main content investigating the events of the role of media social on sexual activity in adolescents and only 11 journals were selected that will be analyzed. The journals that have been found are then specified according to the inclusion criteria and exclusion criteria, namely IC1: journal published, IC2: journal published in 2017-2021, IC3: type of quantitative research, IC4: non-duplicate journal published on Google scholar.

Figure 1

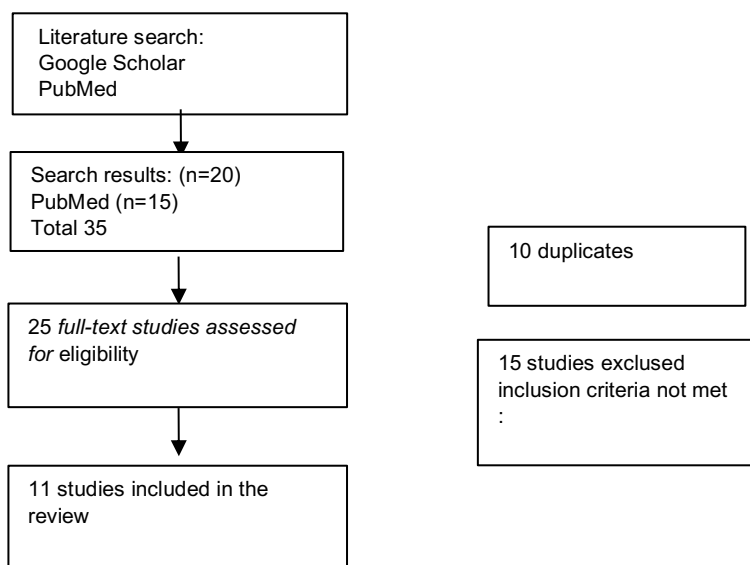


Figure 1. Flow of literature review

3. Results and Discussion

3.1. Results

Table 1. Literature review results

Author's name	Heading	Method	Sampling techniques	Sample	Data analysis	Research results
Laili Himawati, Nurul khodiyah (2020)	The effect of oxytocin massage on labor pain in maternity mothers at Purwodadi Grobogan hospital.	Experimental quasi .	Accidental sampling	15 people	Test Bivariate	P value (0.007) < 0.05 which means there is a difference in pain levels after treatment between each treatment group
Ni putu karunia eka yani	Combination of relaxation and massage techniques for maternity mothers to decrease the intensity of pain, length of labor and apgar skore newborn. Published year: 2017	Quasy experimental	Pre test, post test, control group design	30 respondents	Wilcoxon sign rank test, mann-whitney test and t two samples	Results of analysis: Comparison of pain intensity levels in the control group in the pre-test and post test showed $p = 0.051 > 0.05$, which means there was no difference in pain intensity before and after treatment in the control group. While the comparison of pain in the control group obtained a result of $p = 0.001 < 0.05$, which means a decrease in the intensity of pain before and after giving a combination of relaxation techniques and massage of 2.93
Merry Wijaya, Dessy Winny Tala Bewi, Lina Rahmiati	The effect of oxytocin massage on pain and the progress of childbirth in maternity mothers in Garuda. Published year: 2016	Experimental quasi	Accidental sampling	15 respondents	Bivariate	Research results: P is 0.007. Because the value of P (0.007) < 0.05 means that there is a difference in the level of pain after treatment between each treatment group. P is 0.099. Because the value of P (0.099) > 0.05, there is no meaningful difference between the progress of childbirth between primi

						mothers and multi mothers. That is, the oxytocin massage group and the group that did not do oxytocin massage there was no difference, the two groups both did not experience an acceleration of labor progress.
Wiwini rahmawati, siti arifah, anita widiastuti [10]	The effect of back massage on the adaptation of active phase labor when II and bleeding of labor in primigravida Year of publication: 2014	Quasy experimental	Scale ratio	40 respondents	Mann Whitney test	Results of analysis: There is a back massage to the adaptation of active phase labor pain, the length of labor when II and bleeding in primigravida with a value of $p = 0.001$
Indah Puspitasari, Dwi astuti [11]	Back massage techniques to reduce labor pain at 1 Published year: 2017	Quasy experimental	Consecutive sampling	21 people	Bivariate	Results of analysis: There is a significant difference before and after back massage against labor pain at 1, this shows the application of back massage techniques is quite effective to reduce labor pain when 1
Debbiyatus sofia [12]	The effect of back massage on the decrease in pain during 1 normal delivery. Published year: 2015	Pre-experimental	Accidental sampling	13 respondents	Fishers exact	The results of the analysis found the value of $p = 0.013$ ($p < 0.05$), this means that H_0 rejected H_1 is accepted, it can be concluded that there is an effect of back massage on the decrease in pain intensity during 1 normal delivery of primigravida mothers.
Umu Qonitun, Mariyatul Qiftiyah [13]	Effect of oxytocin massage on his frequency, duration of his inpartu mother in BPM Asri Tuban	Pre experimental	Random sampling	60 respondents	Sample independent, t-test with SPSS	Results of analysis: P value = 0.004 (p value < 0.05). This shows the effect of oxytocin massage on the

	Year of publication: 2019					duration of his inpartu mother in BPM Asri Tuban in 2019.
Elin Supliyani [14]	The effect of back massage on the intensity of labor pain when 1 in bogor city. Published year: 2017	<i>Pre experimental design</i>	<i>Proportional random sampling</i>	26 respondents	Non-metrics statistic test and wilcoxon test	Results of analysis: P < 0.001 then there is an even difference in the intensity of pain during 1 delivery before and after the back masase, meaning there is an effect of massage on the intensity of pain during 1 delivery.
Nahid bolbol, Seyedeh Mosoumi, Farideh Kazemi [15]	Effect of Massage Therapy on Duration of Labour	<i>Randomized Control</i>	<i>Random sampling</i>	100 respondents	Control groups based on pre specified sequences	Results of analysis: P <0.05 there is the influence of massage to speed up the labor process, and accelerate the progress of labor progress.
Gallo Rubneide Barreto Silva, et al [16]	Massage reduced severity of pain during labour: Negara Brazil	<i>arandomised trial</i>	46 respondents Age 20-31 years with <i>primigravida parity and multigravida</i>	60 respondents	Sample independent t-test with SPSS	Massage can reduce pain or pain in the active phase of labor reported on a visual analogue scale of 100 mm, with an average effect of 20 mm, which exceeds the clinically important difference of at least 13 mm., the control group compared to the control group in the presence of cervical dilation of 3-5 cm (p <0.05). Taghinejad et al (2010) also detected a substantial reduction in labor pain (p =0.001) in participants who received massage compared to the music therapy group. Our research therefore adds support to the idea that the

Kamilya Jamel Baljon , Muhamm ad Hibatullah Romli, Adibah Hanim Ismail, Lee Khuan, Boon How Chew [17]	Effectiveness of breathing exercises, foot reflexolog y and back massage (BRM) on labourpan d newborn outcomes among primigravidae during the first stage of labour in year 2020 Saudi Arabiaain, anxiety, duration, satisfactio n, stress hormones	<i>This randomise d controlled trial</i>	<i>single-blind parallel</i>	40 responde nts aged 20- 35 years and primigravi d parity	Randomized control trial, where participants will be tested who receive massage actions and do not	effects of massage on pain may be clinically beneficial. There is a correlation between the administration of oxytocin massage to decreased pain levels with a result of $r = 0.54$ and will be more Maximum when combined with other methods
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3.2. Discussion

Based on the results of the literature review that has been presented, there is a relationship between oxytocin massage and pain reduction in inpartu patients. Research conducted by [18] is an oxytocin massage is very beneficial for maternity mothers because it can reduce pain during labor. When pain can be handled the mother can relax and make labor comfortable so that it can follow the labor process calmly. When the mother's condition in labor feels calm the delivery will run normally. In line with the theory put forward by [1] which states that in the process of childbirth often makes the mother anxious and synonymous with pain. Labor pain is a physiological process. But pain if not treated properly will cause problems that include increasing the worry and anxiety of the labor process so that the production of the hormone adrenaline increases and causes vasocontraction that causes the mother's blood flow to the fetus to decrease. According to the study [5] the average length of labor at the time of delivery at the time of I both in the intervention group and the control group was within normal limits. If seen in the old partograph the delivery takes place has not crossed the alert line. The group that received a combination of relaxation techniques and the opening old massage at the time I starting from the initial cervical opening to the complete opening was 478.9 minutes.. The length of labor can be determined by the speed of the opening of the cervix. The speed of the cervical opening is influenced by various factors. The most important factor is the strong weak uterine contractions which are largely determined by the secretion of the hormone oxytocin. This is in line with the theory of [19] which is the importance of oxytocin massage for helps speed up the labor process so that it does not last long and there are no complications of contact.

Pain in maternity mothers is caused by a reduced supply of oxygen to the uterine muscles, due to short contractions. Causes pain to be higher so that the supply of oxygen to the uterine muscles Not fully recovered. At the time labor, pain caused by the presence of Uterine contractions that result in dilation and thinning In maternity mothers who are given massages Oxytocin says that feeling more calm, more comfortable in the face labor [18]. Massage given Benefiting the mother of birth. Blood circulation and stretch the area of the muscles so that the pain experienced during the labor process as well. It's getting less and less. Oxytocin massage when the patient feels pain due to delivery can help midwives in give midwifery care, because administration of oxytocin massage in maternity mothers normal when I active phase of labor can be minimize the side effects that appear and at a low cost [2]. Post test results on massage groups Oxytocin shows a decrease in rates pain in the birthing mother after massage Oxytocin. This decrease in pain is due to this technique has a stimulating way of working. The body releases

compounds. Endorphins In this study, oxytocin massage It is very beneficial for birthing mothers because it can reduce pain during childbirth. When pain can be treated, the mother will feel relaxed and comfortable so that you can follow the process delivery calmly. When the mother's condition when delivery is in a calm condition Labor will run normally. If Birthing mothers in a state of stress system sympathetic nerve serves to maintain heart activity. Barriers to nerves sympathizers will decrease the frequency and slightly reduces the variability of the pulse the heart of the fetus. If you can't relax in the birthing process can cause anxiety and endocrine response, and this can cause sodium retention, excretion potassium and decreased glucose. This condition can cause secretions epinephrine that can cause inhibition of activity myometrium causes contracting. The uterus is disturbed. If in labor uterine contractions are disrupted, labor is not it will go right. The results of this study show that oxytocin massage is necessary for the mother maternity since the time I [20]. The ability to tolerate labor stress depends on perception. individuals to the event of labor faced. Oxytocin massage is a form of affection that can be a midwife or the family gives it to the mother who will maternity. This attitude has its advantages: You feel safe and able to control himself. Mother given a touch experiencing warmth and friendshi during labor more can handle baby [18].

Oxytocin massage method during labor Helps increase the release of substances Oxytocin, a hormone that facilitates labor, controlling the pain settling, controlling feelings of stress [21]. Reduce or relieve pain in the mother who is about to give birth, can improves relaxed conditions in the body by triggering a feeling of comfort through skin surface, reducing the risk complications in labor and bleeding occurs [3]. Calm conditions making hormonal effects in the body, This massage is also very helpful. strengthening the bond between wife and husband or a delivery helper who massages the mother. According to Morhen's 2018 research. Prove that oxytocin massage can Increase trust and comfort so that even though the contractions increase, the taste the pain is reduced and not even felt. oxytocin massage may also increase oxytocin, because oxytocin is needed in the process of delivery according to Aryani's 2015 research, stating that the massage given often when the mother is facing labor can suppress the production of pain mediators, When the pain is reduced the mother can be calm and be able to adapt to the circumstances of labor . So that the delivery goes well Patographs within normal limits. Looking at the results of the research Showing a decrease in pain significant after the massage of oxytocin, Then this oxytocin massage can be used as choice because there are no side effects for mother or fetus, compared to Some of the mother's usual methods of labor choose to reduce labor pain, like sectio caesarea that has an effect in addition to those that can harm the mother and also the fetus [22].

4. Conclusion

Based on the results of research and discussion it can be concluded that there is a relationship between oxytocin massage to reduce labor pain and accelerate contractions in inpartu patients. So it is expected that the delivery helper should always carry out back massage techniques to reduce the pain of labor and teach the family or companion to accompany during labor. In order to participate in doing back massage on maternity mothers to reduce pain, shorten the length of time II and reduce the amount of bleeding long when II and the amount of bleeding with the mother's back massage technique since the client is still pregnant and needs to be held prenatal class as a means of knowledge transfer. For further researchers, should conduct ongoing research by analyzing other factors that affect childbirth (for example, previous experience of accompanying physical illness, cultural background and residence).

Declaration

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