

THE EFFECT OF APPLYING THE MARYAM DELIVERY METHOD ON THE COMFORT OF PRIMIGRAVIDA MOTHERS

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ABSTRACT

Labor is a process that is 90% dominated by pain that will arise at the first phase. The negative effects of labor pain include maternal metabolic acidemia, fetal acidosis, and dysfunctional labor. Pharmacological methods using chemical drugs, tend to be more expensive and potentially have side effects. childbirth modification methods with various techniques, one of which is Maryam's labor technique. The purpose of this study was to analyze the effect of deep breath relaxation techniques on comfort characterized by a decrease in pain intensity. This study used an experimental quasy design. The location used for this research is at PMB Yeni Nurhayani, S.Tr., Pandeglang District from April to May 2023. The population used in this study was maternity mothers at the study site during the study process as many as 30 mothers selected by purposive sampling. Maryam's technique is done by positioning the body standing leaning on something sturdy with a half-squat position and legs wide open. The instrument used in this study was the Verbal Analog Scale. The analysis used is multiple linear regression. The mean degree of pain decreased after Maryam's technical intervention (Mean= 5.80; SD=1.34) was lower than before Maryam's therapy (Mean= 4.90; SD= 1.15), and statistically significant ($p < 0.001$).

Keywords: comfort; maryam method; primigravida; pain

INTRODUCTION

Labor is a process dominated by pain, more than 90% of labor pain will arise during the first latent phase, namely the opening of the cervix to 3 cm and an increase in the intensity of pain in the active phase (ranging from 4 cm to 10 cm). Based on the literature review reported by which summarized the pain intensity of 2,700 it is known that 15% of maternity mothers experience mild pain at the beginning of labor, 35% with moderate pain, 30% with severe pain when entering the active phase and when 2 and 20% experience very severe pain. (Rejeki, 2017)(Karwati, 2023) The negative impact of labor pain comes from changes in maternal breathing patterns and an increase in catecholamine-mediated stress response. Potential physiological effects of labor pain include: hypocarbia, respiratory alkalosis and autonomic stimulation and catecholamine release resulting in increased stomach acid, lipolysis, increased peripheral vascular resistance, heart blood circulation, blood pressure, decreased placental perfusion, and uncoordinated uterine activity. Severe impacts can lead to maternal metabolic acidemia, fetal acidosis, and dysfunctional delivery. (Karwati, 2023; Wijayanti, 2020)

Labor pain can also cause hyperventilation resulting in increased oxygen demand, increased blood pressure, and reduced intestinal motility and urinary vesicles. This situation stimulates an increase in catecholamines which causes disturbances in the strength of uterine contractions resulting in uterine inertia. (Anita, 2017) If labor pain is not treated it will cause a long partus and complications that can occur are vesicovaginal fistula and / or rectovaginal, sepsis, uterine rupture which can eventually lead to bleeding and shock, even maternal death. (Fitri, 2019) One of the basic efforts that can be done in reducing MMR is to minimize labor pain felt by the mother. Labor pain can be controlled by 2 (two) methods, namely pharmacological and nonpharmacological. Pharmacological methods using chemical drugs, tend to be more expensive and have the potential

to have adverse effects on the mother and fetus. While nonpharmacological methods can be done more simply, cheaply, effectively, without adverse effects and increase satisfaction during labor. Some nonpharmacological methods are labor modification methods with various techniques, one of which is Maryam's labor technique, deep breath relaxation, and the administration of various aromatherapies.(Septiani, 2022)(Wijayanti, 2020)(Anita, 2017; Herawati, 2016).

Based on research, it is reported that the process of childbirth method maryam is When contractions occur, the patient positions himself leaning and half squatting. The process of childbirth in obstetrics does not contradict the process of childbirth in the Qur'an, which is stated in Sura Maryam verses 22-26. However, the Qur'an does not explain in detail about the process of childbirth because some of the contents of the Qur'an are universal that require explanation. (Hidayati, 2020) In obstetrics, it is explained, as a sign that the beginning of labor is imminent begins with contractions, as implied in Sura Maryam verse 22. Then the leaning position described in the Qur'an, it turns out that in midwifery this position is the best position for childbirth mothers. Legs and thighs opening wide will help widen the pelvic bones to expand the birth canal. Because it supports the force of gravity, so that the baby easily and quickly comes out, reduces tearing in the birth canal and reduces labor pain. The purpose of this study was to analyze the effect of deep breath relaxation techniques on pain intensity in labor during the active phase 1 at PMB Yeni Nurhayani, S.Tr.Keb Pandeglang Regency -Banten in 2023.(Utami, 2020)

METHOD

This study used *an experimental quasy design*. The location used for this research is at PMB Yeni Nurhayani, S.Tr., Pandeglang District from April to May 2023. The population used in this study was maternity mothers at the study site during the study process as many as 30 mothers selected by *purposive sampling*. Normal childbirth when 1 phase is active. Blood pressure normotensiveness. Composmentist consciousness. Intact membranes. Gestational age aterm. The dependent variable is the degree of pain. The independent variable is the provision of care by the Maryam method. Maryam's technique is done by positioning the body standing leaning on something sturdy with a half-squat position and legs wide open when felt contractions are getting stronger. The instrument used in this study was the measurement of the degree of pain using the *Verbal Analog Scale* with a range of 1 for painless and 10 for very severe pain. Bivariate analysis performed on two variables that are thought to be related or correlated. In this study, the analysis used was *Paired t test*. In addition, analysis to control confounding variables used multiple linear regression analysis.

RESULT AND DISCUSSION

Table 1
Characteristics of Respondents

Characteristic	Mean	SD	Min	Max
Pain before	5.80	1.34	3	9
Pain after	4.90	1.15	3	7
Age	26	7.2	17	37

Table 1 shows the characteristics of respondents based on the degree of pain before and after applying the Maryam method. After the application of the maryan method there was a decrease in the average degree of pain and maximal pain. The mean degree of pain decreased after Maryam's technical intervention (Mean= 5.80; SD=1.34) was lower than before Maryam's therapy (Mean= 4.90; SD= 1.15), and statistically significant ($p < 0.001$).

Table 2.

Bivariate analysis of the effect of Maryam's labor technique with a decrease in the degree of pain.

Variable	Category	Mean	SD	p
Degree of Pain	Before	5.80	1.34	<0.001
	After	4.90	1.15	

The results of this study showed a significant effect of the application of Maryam technique on reducing the degree of pain in maternity mothers at 1. This result is in line with research reporting that the Paz Maryam Method affects the length of time I of the active phase of labor at the Pelitakan Health Center in 2021 with a value of $p = 0.011$. (Wulandari, 2021) Another study that reported the same results is where in addition to Maryam techniques applied in labor, there are Maryam exercises that provide the effect of reducing pain scales and can be applied when pregnant or in labor. (Fitriana, 2023) Physiologically pain in labor is caused by a fairly complicated mechanism, some of the causes of labor pain include: (1) There is pressure on the nerve endings between the muscle fibers of the corpus fundus uterus. (2) ischemic myometrium and cervix due to contractions resulting from blood discharge from the uterus and vasoconstriction due to excessive activity of sympathetic nerves. (3) Contractions in the cervix and lower segments of the uterus cause fear that spurs excessive activity of the sympathetic nervous system. (4) Dilation of the cervix and lower segment of the uterus. The hypothesis of labor pain in time I is mainly due to dilation of the cervix and lower segments of the uterus due to dilation, stretching and possible tearing of tissue during contractions. Pain in each phase of labor is delivered by different nerve segments. Pain at time 1 comes mainly from the uterus. (Juniartati, 2018)(Juwita, 2019)(Solehati, 2018).

Maryam technique positions a woman who is about to give birth to lean on something sturdy in a half-squat position, besides that the legs and thighs open wide will help widen the pelvic bones to expand the birth canal. This position will press on the abdomen and suppress pain, in addition, the force of gravity will help the fetus out of the birth canal. (Hasnah, 2018) Reduced pain will affect cervical dilation, because severe pain can affect the increase in heart rate, respiratory system, increase in blood pressure and can cause stress so as to inhibit the production of the hormone oxytocin which results in inadequate contractions and disruption of cervical dilation. (Smith, 2018) Pain perception is also influenced by various factors including age and parity, for primiparous mothers in old age will generally experience longer labor and feel more pain than young mothers. So it can be said that primipares with old age will feel a higher intensity of pain and longer labor than young primiparous age. (Hariyani, 2019)

CONCLUSION

The degree of pain decreased after Maryam's technical intervention (Mean= 5.80; SD=1.34) was lower than before Maryam's therapy (Mean= 4.90; SD= 1.15), and statistically analysis show the significant correlation.

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