# THE LONG OF LABOR IN THE ACTIVE PHASE I IN THE BANGKINANG HOSPITAL KAMPAR DISTRICT AS A RESULT OF MATERNAL POSITIONING

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#### ABSTRACT

In 2017, Indonesia had a maternal death rate of 305 per 100,000 live births. In 2017, the MMR in Kampar District was 73 per 100,000 live births, compared to 112 per 100,000 live births in Riau Province. The mother and fetus will suffer if the initial stage of labor lasts too long. This study was conducted at Bangkinang Hospital in the Kampar Regency to ascertain the impact of the mother's position on the duration of labor during the first active phase. This kind of study uses a post-test only control group and a true experiment research design in a quantitative manner. Between April and July 2019, the study was conducted at the Bangkinang Hospital. Mothers who gave birth between April to June 2019 at the Bangkinang Hospital made up the study's sample, which included 16 respondents standing and 16 respondents in an oblique maternity position. Purposive sampling was used as the sample technique. The dependent T test was used for computerized univariate and bivariate data analysis. The majority of respondents to this study experienced the first active phase of the rapid phase up to 56.3% of the time, and there was a relationship between the mother's position and the length of the active phase of the first stage of labor at Bangkinang Hospital in Kampar Regency (p = 0.003), according to the study's findings. It is suggested that both parties consider using the standing maternity position as a backup option to quicken labor.

Keywords: Duration of Labor, Oblique Maternity Position, Standing Maternity Position

### INTRODUCTION

Persalinan is a process that comes to a close with the submission of the judge's verdict. The current process begins with a set of sequential persalinan steps that are delayed by progressive changes to the services, and it ends with the placement of a placent. Persalinan is a simple process or behavior that is normal, but it has the potential to become abnormal if it is not carried out in a proper manner [1]. Pregnancy, childbirth, and postpartum problems that are not treated adequately and promptly are the direct causes of mother death. Puerperal infections (10%) and prolonged labor (42%) are typically the causes of maternal mortality during the puerperium, Eclampsia (13%), and problems following childbirth (11%). According to data from the World Health Organization (WHO), 3,182 women died from pregnancy-related, childbirth-related, or puerperium-related causes in developing countries in 2017. In underdeveloped nations, maternal mortality and morbidity continue to be major health issues. According to the IDHS data, the

maternal death rate was 228 per 100,000 live births in 2007, 359 per 100,000 live births in 2012, and 305 per 100,000 live births in 2017 [2].

According to data from the Riau Provincial Health Office, the number of maternal deaths in the province of Riau tends to rise. In 2015, there were 108 women per 100,000 live births throughout pregnancy, childbirth, and the postpartum period. In 2016, there were 101 live births, and in 2017, there were 112 live births[3]. According to information from the Kampar District Health Office, there were 142 maternal deaths during pregnancy, childbirth, and the postpartum period in 2015, 115 per 100,000 live births in 2016, and 73 per 100,000 live births in 2017.

A full-term or almost full-term baby is expelled from the mother's body, followed by the placenta and fetal membranes, to complete the process of childbirth. The delivery process is divided into three categories: spontaneous delivery (if the birth occurs naturally through the birth canal with the mother's own strength), artificial delivery (if the birth is aided by outside forces, such as forceps/vacuum extraction, or sectio caesarean surgery is performed), and recommended delivery (labor that does not start on its own but only takes place after rupture of the membranes, administration of pitocin or prostaglandins). Power, passage, passenger, mother psychology, and the presence of birth attendants are all factors that might speed up or delay down delivery [4].

The birth process consists of four stages: stage I, also known as the dilation stage, during which the cervix ripens to a full 10 cm; stage II, also known as the expulsion stage; during which the placenta is born after being detached from the uterine wall during stage III, also known as the uri stage. After placenta delivery, Kala IV begins [5]. The opening of the uterine cervix, which in primigravidas lasts for roughly 13 hours and in multigravidas for roughly 7 hours, marks the end of the first stage. If the initial stage lasts more than 24 hours in primi and 18 hours in multi, it is referred to as being protracted. If the first stage of the active phase lasts longer than six hours, it is considered protracted [6]. Fetal variables, including as fetal attitude, fetal presentation, bottom, and position, are labor passengers. The little fontanel is one of the directions (indicators) of the lowest section of the fetus. Front left, rear left, left transverse, front right, rear right, and right transverse make up the little crown's position [7].

According to Pantiawati, I. (2016)'s research, the position of labor has an impact on how long the initial stage of labor lasts. The location of labor has an impact on how long the first stage of labor lasts, according to Surtiningsih's research from 2017. Additionally, Syaflindawati's (2015) research found that the location of the worker can influence how long the initial stage of labor lasts [8]. In a study conducted by Syaidah, E. (2011), it was noted that 4 respondents were tilted and 1 respondent was not. The active phase of the initial stage of labor for giving birth ladies can be shortened thanks to the tilted position[9]. In contrast to the tilted position, the squatting position was helpful in hastening the progression of the first stage of labor in the active phase, according to a study by Warna.H.S, (2014).

According to a preliminary survey conducted by researchers at Bangkinang Hospital on February 11, 2019 there were 56 spontaneous deliveries in 2016, 61 spontaneous deliveries in 2016, and 42 spontaneous deliveries in 2018, 111 deliveries with complications, 8 deliveries using a vacuum, and 50 deliveries with sectio secaria [10]. In 2016, there were 17 cases of labor with a prolonged first stage. In 2017, there were 18 cases, and in 2018, there were 10 occurrences [11]. It is known that there are disparities in the position of the mother at the time of delivery based on an assessment of the medical records of the mother who was in labor and whose first stage of labor was protracted[12]. The initial stage lasted 1-2 hours longer for moms in a tilted position than for mothers in a standing position. The mother and fetus will suffer if the initial stage of labor lasts too long[13]. The researcher is interested in researching "The Influence of Maternity Position on the Length of Active Phase I Labor at Bangkinang Hospital, Kampar Regency" in light of the aforementioned issues.

#### **METHOD**

This kind of study uses a post-test only control group design and a proper experimental research methodology. Between April and July 2019, Bangkinang Hospital hosted the trial. Mothers who gave birth in April to June 2019 at Bangkinang Hospital made up the study's population. A total sample of 16 respondents—16 in a standing position and 16 in an oblique position—were included. Purposive sampling was used as the sample technique. Guidelines for observation, study-related documentation, stationery, and partograph sheets are examples of research instruments. The dependent T test was used for computerized univariate and bivariate data analysis.

### **RESULTS**

Table 1. Shows how long labor took at Bangkinang Hospital in Kampar Regency during the first stage of the active phase.

No	Labor Length		Amount		
		F	9/0		
1	Fast (≤6 jam)	19	59,4%		
2	Slow (>6 jam)	13	40,6%		
Tota	al	32	100		

According to table 1, the first stage of the active phase was fast for the majority of respondents—59.4%—and slow for the remainder—40.6%.

Table 2 Shows how long labor took in the experimental group at Bangkinang Hospital in Kampar Regency during the first stage of the active phase.

No	Lama Persalinan	Lying Sideway		
		F	%	
1	Fast (≤6 jam)	5	31,3%	
2	Slow (>6 jam)	11	68,7%	
Tota	ıl	16	100	

According to table 2, the first stage of the slow active phase was experienced by the majority of participants in the experimental group (laying on their side) as much as 68.7% and the rest as much as 31.3%.

The time it took for the control group's labor to reach the first stage of the active phase at Bangkinang Hospital in Kampar Regency

Table 3 Shows how long labor took in the control group at Bangkinang Hospital in Kampar Regency during the first stage of the active phase.

No	Labor Legth	Stand		
	-	F	%	
1	Fast (≤6 jam)	13	81,3%	
2	Slow (>6 jam)	3	18,7%	
Tota	1	16	100	

According to table 3, the majority of respondents in the control group (standing position) went through the active phase's first stage quickly (up to 81.3%), whereas the remainder went through it slowly (up to 18.7%). Mother's Position's Impact on Active Phase I Delivery Time at Bangkinang Hospital in Kampar Regency First, the normalcy test was run, followed by the bivariate analysis. The normality test is used to determine whether the variances of two or more distributions are equal, which means that it is used to determine whether the independent and

dependent variable's data are homogenous or not. When respondents with fewer than 50 respondents were subjected to the Shapiro-Wilk test for data normality, the results showed that the experimental and control groups had normally distributed data with p values > 0.05, or 0.138 and 0.087, respectively. The data is therefore presumed to be regularly distributed. According to the findings of the research, the mother's position has an impact on how long the first stage of labor lasts at Bangkinang Hospital in Kampar Regency when it is in the active phase:

Table 4. Position of the Mother Against Labor Length in Active Phase I at Bangkinang Hospital,

Kampar Regency							
Posisi Persalinan		Long Kala I Fase Actif			Total		p value
	Fas	Fast		Slow			
	F	%	F	%	n	%	
Stand Lying Sideway	13 5			21,4 78,6		50 50	0,003
Total	18	100	13	100	32	100	

Table 4 shows that the majority of respondents who were in the first stage of the rapid active phase were standing, with as much as 72.2% of them doing so. The majority of responders (78.6%) who had a sluggish first stage of the active phase were lying on their side. The duration of the first stage of labor in the active phase at Bangkinang Hospital, Kampar Regency, is influenced by the mother's position, according to the findings of an independent t-test, which yielded a p value of 0.003, which is a minor improvement over 0.05.

## **DISCUSSION**

According to the findings of the univariate analysis, the majority of respondents went through the first stage of the active phase, which was quick for 56.3% of them and sluggish for the remaining 43.8%. 50% of responses followed the direction of the side-lying delivery position, and 50% followed the standing position of labor. The length of labor during the active phase of the first stage at Bangkinang Hospital in Kampar Regency was influenced by the mother's position, according to the results of the bivariate analysis, which yielded a p value of 0.003, which is less than 0.05.

Another study that supports this one is Pantiawati.(2016) I's study on how the standing position during labor influences the length of the first stage of labor. The length of the first stage of labor

is influenced by the delivery position, according to Surtiningsih's research from 2017. Additionally, Syaflindawati's (2015) research found that the location of labor can impact how long the first stage of labor lasts. In a study by Syaidah.E. (2011), it was noted that 4 respondents adopted a sideways stance whereas 1 did not. The active phase of the initial stage of labor for giving birth ladies can be shortened thanks to the tilted position.

The baby's continuous descent with the need to push can be assisted by standing. An upright stance is part of the standing position anatomically. Due to the pelvic axis and the fetus's position being in the direction of gravity, this position is thought to be the most advantageous for giving birth. Standing up might make the baby's head smaller, the pelvis bigger, and the urge to push stronger (Prawirohardjo.S, 2012).

According to the duration of labor, the majority of respondents who were placed in a standing position had their active phase of labor develop more quickly. The standing position is thought to be more effective than the mirin position because the mother feels an immediate urge to push along with the contractions that take place, making the desire to push an unconscious reaction to pressure when the cervix has not fully opened and the thinning of the cervix is already palpable thin, soft, and stretchable, infant on the pelvic floor.

This is because the thinning of the cervix, which is very thin, soft, and stretched, is a sign of a standing position. In this position, the pelvic cavity can enlarge by 28% at the pelvic inlet and utilize gravity to descend the baby's head (lowest part). Standing up can make it easier to empty your bladder. The lower third of the fetus will slow down if the bladder is full (Sulistyawati, 2009).

The woman may or may not experience an immediate urge to push (push) along with the contractions that take place once the cervix is extremely thin, soft, and stretched. Whether the desire comes on right away or after a little respite depends on the baby's position in the pelvis, velocity of descent, and amount. The urge to push will lessen or grow stronger with time or after shifting into an upright sitting or standing position. The mother's unconscious response to the baby's pressure on the pelvic floor is the impulse to push (Suwanti, 2015).

The mother must lie on her left side in the "left side position," with one leg raised and the other straight or piled on the lifted leg (like hugging a bolster). In addition to reducing strain on the inferior vena cava and preventing lacerations or rips in the delivery canal, lying on the left side can make women feel more at ease and lessen the risk of hypoxia by ensuring that the oxygen supply is not interrupted (Syaidah, 2011).

According to the researcher, mothers in an oblique position endure the initial stage of labor more so than mothers in a standing position. According to the findings of the study, respondents were placed in a slanted position, which had a lessening effect on the rate of birth. This is because the cervix is still thick despite its weakening. Take a few calm breaths until the urge to push passes if

the mother feels the need to push too soon while lying on her side. Meanwhile, when it is upright, it makes use of gravity's pulling power to its benefit. In order to prevent this, the mother is provided with a cushion that can be used to support the baby's head and torso while she is standing.

### **CONCLUSION**

- a. The first stage of the active phase, which was fast for 56.3% of respondents and slow for the remaining respondents (43.8%), was experienced by the majority of survey participants.
- b. The first stage of the slow active phase was experienced by the majority of participants in the experimental group (laying on their side) at a rate of 68.7%, and the rest at a rate of 31.3%.
- c. The initial stage of the active phase was mostly experienced by responders in the control group (standing position), with a quick portion of 81.3% and a sluggish portion of 18.7%.
- d. At Bangkinang Hospital in Kampar Regency, there is a relationship between the mother's position and the length

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