

The Effect Of Giving Oxytocin Drips On Bleeding In The Iv Stage Of Labor At Rskdia Siti Fatimah Makassar

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ABSTRACT

Background: Maternal mortality of childbearing age in 2015 was 195 per 100,000 live births. Millennium Development Goals (MDGs) target: Maternal Mortality Rate (MMR) in Indonesia in 2015 must reach 125 per 100,000 live births. In fact, the SDG's target states that by 2030 it is hoped that maternal deaths will be less than 70 per 100,000 live births². This has not been achieved because based on surveys, the MMR is still 305 per 100,000 live births. This figure is still in contrast to the increasing coverage of services for pregnant, maternity and postpartum mothers. K1 health service coverage is 95.75% and K4 coverage is 87.48% and coverage of birth assistance by health workers is 79.13%.
Research Method: This research uses the Cross Sectional Study method with a type of research that emphasizes the measurement/observation of independent and dependent variable data at one time.
Research Results: Based on the results of the chi-square analysis, the value $p = 0.024$ is smaller than $\alpha = 0.05$, this means that H_0 is rejected and H_a is accepted. Thus, there is an effect of administering oxytocin drips on bleeding in the fourth stage of labor.

Keywords: Drips, Oxytocin, Bleeding Introduction

Introduction

Deaths of pregnant, maternity and postpartum women are still a big problem in developing countries, including Indonesia. Deaths of women of childbearing age or women of productive age in developing countries are caused by problems related to pregnancy, childbirth and postpartum. According to the latest WHO data, maternal mortality in childbearing age in 2015 was 195 per 100,000 live births. Millennium Development Goals (MDGs) target: Maternal Mortality Rate (MMR) in Indonesia in 2015 must reach 125 per 100,000 live births. In fact, the SDG's target states that by 2030 it is hoped that maternal deaths will be less than 70 per 100,000 live births². This has not been achieved because based on surveys, the MMR is still 305 per 100,000 live births. This figure is still in contrast to the increasing coverage of services for pregnant, maternity and postpartum mothers. K1 health service coverage is 95.75% and K4 coverage is 87.48% and coverage of birth assistance by health workers is 79.13% (Pustadtin, 2014)

The factor that can be initiated so that labor induction can be successful is the maturity of the cervix. Assessment of cervical maturity using the Bishop Score. The results of the assessment will influence the success of labor induction. A Bishop Score result of less than

5 risks a failed induction. Before an induction is carried out, there is a standard procedure that must be carried out, namely an internal examination to assess the maturity of the cervix. Cervical maturity is divided into two groups, namely mature and immature cervix. About half of women who experience postterm pregnancies are found to have an immature cervix, so cervical ripening measures are needed. Cervical ripening techniques can be pharmacological or non-pharmacological (Natalina, 2017)

There are several recommended methods of labor induction, namely pharmacological and mechanical or non-pharmacological induction. Pharmacological induction is induction by administering prostaglandin E¹ analogs which will have the effect of uterine contractions. In the trade name prostaglandin E¹ is Misoprostol. Misoprostol can be found in tablet form in 2 preparations, 100 µg and 200 µg. Misoprostol for induction can be given vaginally or orally at a dose of 25 µg to 50 µg which is repeated every 3-6 hours. The advantage of misoprostol induction is that the misoprostol will dissolve within 20 minutes and reach its peak within 30-60 minutes. Vaginal administration shortens induction time – 4 labors are shorter. Success was comparable to administration of oxytocin. The disadvantage of misoprostol induction is tachysystole, a symptom of hyperstimulation characterized by contractions lasting more than 60 seconds which can cause fetal distress and imminent uterine rupture. The adverse fetal side effects of misoprostol induction occur due to hyperstimulation of uterine contractions (Satriyandari, 2017)

Mechanical or non-pharmacological induction methods are administering an induction Foley catheter (or also called a balloon catheter) and administering laminaria. However, in Indonesia what is commonly used is the Foley catheter. The Foley catheter is placed in the internal cervical ostium. Several studies say that installing a Foley catheter can produce a rapid increase in Bishop Score. Ripening of the cervix by means of the foley's mechanical pressure on the cervix causes the amniotic membrane of the lower uterine segment (SBR) to detach. This manipulation increases the formation of prostaglandins. This Foley catheter causes activation of the decidua to produce prostaglandin compounds which are responsible for initiating labor. The advantage of Foley catheter induction is that it quickly improves the Bishop Score, the larger the volume given to the Foley catheter, the more effective it is. The combination with oxytocin will have better effects. The disadvantage of this mechanical method is that the labor induction time is longer than pharmacological induction (Prata, 2017)

The role of midwives in pathology cases, especially in the induction of labor in hospitals, is to provide midwifery care, namely care provided by midwives as team members whose activities are carried out simultaneously or as part of a health service activity process (Satriyandari, 2017) Data from RSKDIA Siti Fatimah in 2024 saw the number of mothers giving birth as many as 1668 people and 11 people who experienced bleeding. In 2023 the number of mothers giving birth was 1392 people and 17 people experienced bleeding. Meanwhile, in 2024, from January to September, the number of mothers giving birth was 889 people and 9 people experienced bleeding. This is the basis for researchers to conduct research entitled The Effect of Giving Oxytocin Drips on Bleeding in the Fourth Stage of Labor at RSKDIA Siti Faimah Makassar. The aim of this research is to determine whether there is an effect of administering oxytocin drips on bleeding in the fourth stage of labor at RSKDIA Siti Fatimah Makassr.

Methods

This research uses the Cross Sectional Study method with a type of research that emphasizes the measurement/observation of independent and dependent variable data,

at one time. Measurement of unlimited variables, must be precise at the same time but means that each subject is only subjected to one measurement without repeating the measurement. This research was conducted at RSKDIA Siti Fatimah Makassar which was carried out in October 2023. The population in this study were all mothers who were giving birth at RSKDIA Siti Fatimah Makassar. And the sample in this study was mothers giving birth with the help of Oxytocin Drips at RSKDIA Siti Fatimah Makassar. Sampling uses the Purposive Sampling Technique, namely sampling by taking cases or respondents by limiting the specified criteria. The inclusion criteria in this study were all birth mothers who were given oxytocin, birth mothers who experienced bleeding, birth mothers who were recorded in the medical records of RSKDIA Siti Fatimah Makassar. Exclusion criteria in this study were mothers who experienced complications during delivery, women who gave birth experienced a tear in the birth canal, and were not willing to be respondents.

All data obtained will be analyzed through bivariate analysis by collecting data in research and processed analytically with the Chi Square (X²) test using a 2x2 contingency table. Next, the results are processed by determining the existence of a relationship between the two independent variables and the dependent variable.

1. Results

2. Analisis Bivariat

3. Tabel 3.1

Effect of Giving Oxytocin Drips on Bleeding in the Fourth Stage of Labor at RSKDIA Siti Fatimah Makassar

Injection Drips Oksitosin	Perdarahan pada Kala IV				Total	Value <i>p</i>
	Yes		No			
	n	%	n	%	N	
Yes	1	11.1	8	88.9	9	100
No	5	71.4	2	28.6	7	100
Jumlah	6	37.5	10	62.5	16	100

Source : Data Sekunder 2023

Table 5.6 shows that of the 16 people sampled, 9 people were given oxytocin drips, there was 1 person (11.1%) who experienced bleeding in the fourth stage of labor and 8 people (88.9%) who did not experience bleeding in the fourth stage of labor. Meanwhile, 7 people were not given oxytocin drips, there were 5 people (71.4%) who experienced bleeding in the fourth stage of labor and 2 people (28.6%) who did not experience bleeding in the fourth stage of labor. Based on the results of the Chi Square analysis, the value $p = 0.024$ is smaller than $\alpha = 0.05$, this means that H_0 is rejected and H_a is accepted. Thus, there is an influence between oxytocin drips and bleeding in the fourth stage of labor.

Discussion

Bleeding in the fourth stage generally occurs due to the cutting of blood vessels from the uterine wall after placental implantation because the maternal sinuses where the insertion into the uterine wall is open. Usually there is not much bleeding, because contractions and retractions of the uterine muscles press on the open blood vessels, so that the lumen closes, then the blood vessels are blocked by blood clots. The general amount of blood that comes

out is no more than 500 cc or the equivalent of 2.5 glasses of star fruit. The results of the study showed that of the 16 people used as samples, 9 people were given oxytocin drips, there was 1 person (11.1%) who experienced bleeding in the fourth stage of labor and 6 people (88.9%) who did not experience bleeding in the fourth stage of labor. Meanwhile, there were 7 people who were not given oxytocin drips, there were 5 people (71.4%) who experienced bleeding in the fourth stage of labor and 2 people (28.6%) who did not experience bleeding in the fourth stage of labor.

Based on the results of the chi-square analysis, the value $p = 0.024$ is smaller than $\alpha = 0.05$, this means that H_0 is rejected and H_a is accepted. Thus, there is an effect of administering oxytocin drips on bleeding in the fourth stage of labor. The results of this study are in line with those conducted by (Escobar, 2023) showing that there is a significant difference between the shorter IV duration of misoprostol with a mean SD of 9.09 ± 2.15 compared to oxytocin 10.45 ± 2.26 ($p = 0.000$) while there are no side effects. showed a significant relationship between the use of the two drugs ($p = 0.098$). The results of this study are also in line with those carried out by (A.Fahira Nur, 2019) that the longest duration of labor using oxytocin was 2 hours (18.20%), for misoprostol users it was 6 hours (27.80%) and for both users the duration time 7 hours (22.70%). The research results showed that the most indications for induction were oxytocin, namely stage 1 of the latent phase at 66.20%, misorostol for premature rupture of membranes (25.00%) and in both cases preeclampsia (22.70%).

Researchers assume that sometimes bleeding is caused by abnormalities in the blood clotting process resulting from hypofibrinogenemia (placental solution, retention of a dead fetus in the womb, amniotic embolism). If part of the placenta separates and part does not, bleeding occurs because the uterus does not contract and retract properly at the boundary between the two parts. Furthermore, if part of the placenta has been delivered, but a small part is still attached to the uterine wall, bleeding can occur during the postpartum period. The most important cause of post partum bleeding is uterine atony. If the placenta has not been delivered, take immediate action to remove it. After the placenta is delivered, it is necessary to determine whether there is bleeding due to uterine atony or due to injury to the birth canal.

Conclusion

From the results of research conducted in July 2024, it can be concluded that the research results show that of the 16 people used as samples, 9 people were given oxytocin drips (56.2%) and 7 people (43.8%) were not given oxytocin drips. And the research results also showed that of the 16 people sampled, 6 people experienced bleeding in the fourth stage of labor (37.5%) and 10 people (62.5%) did not experience bleeding in the fourth stage of labor. So it can be concluded that there is an effect of giving oxytocin drips on bleeding in the fourth stage of labor with a p value = 0.024%.

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