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Research Article

The Effectiveness of Using Misopostol and Oxytocin in Handling Post Partum Hemorrhage at the Rangga Medika Cikampek Clinic, Karawang Regency in 2022

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Abstract

Aims : This study aims to determine the effectiveness of the use of misoprostol and oxytocin in the treatment of postpartum hemorrhage at Rangga Medika Clinic, Karawang Regency in 2022.

Methods : is an analytical method with a cross sectional approach. The research was conducted at Rangga Medika Clinic, Karawang Regency. Research data using observation sheets. The number of respondents as many as 30 people. Data analysis used dependent t-test.

Results : The results showed that the results of the dependent t test (paired t test) showed that there was a difference in the use of misoprostol and oxytocin in the treatment of postpartum hemorrhage with $p < 0.05$.

Conclusions : The young age of the reproductive organs and inadequate physiological functions affect pregnancy acceptance and the postpartum period. The majority of respondents were of a healthy reproductive age between 20 and 35 years, with high-risk pregnancies occurring after that age.

Keywords:

Misoprostol and oxytocin, postpartum hemorrhage.

INTRODUCTION

Maternal and infant mortality in Indonesia have always been the primary concern. In one mother, a neonatal death can occur every three minutes and every hour. These fatalities are associated with pregnancy, childbirth, or the postpartum period (1). Conservative treatment for postpartum hemorrhage involves maintaining blood volume stability through intravenous administration of a large-diameter cannula, progressive observation, intravenous administration of crystalloid fluids, and blood transfusions. To stop severe postpartum bleeding, uterotonic and uterovaginal tamponade are administered (2). For the treatment of postpartum hemorrhage with uterotonic prophylaxis, there are numerous varieties and combinations of drugs, each with advantages and disadvantages. Misoprostol, oxytocin, methylergometrine, and ergometrine have been compared to one another. Placenta

previa, fetal presentation, duration of labor, uterine and cervical trauma during delivery, with a history of surgery, induction and augmentation, delivery, macrosomia, and low-lying placenta are risk factors for postpartum hemorrhage (3).

Until now, the high maternal mortality rate has only revolved around three major problems, namely bleeding, preeclampsia-eclampsia, and infection; therefore, it is anticipated that each role of health workers will focus more on these three issues (4). If one of the danger signs is detected in the mother, she should be referred to a facility with the necessary apparatus and an obstetrician specialist, and crystalloid fluids should be administered prior to labor (5). The originality of this research is based on several previous studies which have relatively the same characteristics in terms of study themes, although they differ in terms of subject criteria, number and position of research variables or analytical

methods used. (6) Research that will be conducted regarding the Effectiveness of Using Misoprostol and Oxytocin in Handling Post Partum Hemorrhage at the Rangga Medika Clinic, Karawang Regency in 2022. This study is related to and nearly identical to that of mothers who had postpartum hemorrhage. According to data acquired at BPM Suryati from January to June 2021, 20 mothers gave delivery with postpartum hemorrhage out of 62 deliveries. Researchers at BPM conducted a preliminary study in September 2021 that included 12 mothers who gave birth and four people who experienced postpartum hemorrhage. As can be seen from the data above, many moms who give birth experience postpartum bleeding; therefore, therapy must be suitable so that problems and death do not occur in postpartum mothers. It is known that the average postpartum hemorrhage before and after the use of misoprostol and oxytocin, as well as to examine the effectiveness of misoprostol and oxytocin in the treatment of postpartum hemorrhage at BPM Suryati Bekasi in 2021.

Based on the above description, the problem you wish to investigate is the Effectiveness of Using Misoprostol and Oxytocin in Handling Postpartum Hemorrhage at the Rangga Medika Clinic, Karawang Regency, in 2022, there were 30 of 55 moms giving delivery. Based on the foregoing, the formulation of the problem "Effectiveness of Using Misoprostol and Oxytocin in the Management of Postpartum Hemorrhage at

the Rangga Medika Clinic, Karawang District" can be stated.

METHODS

This study's research design employs an analytic method with a cross-sectional approach, in which the dependent variable and data for the independent factors are collected concurrently. Following the collection of data, an overview of the frequency distributions of the dependent and independent variables will be shown, followed by a discussion of the relationship between the two variables. The population is a group of objects/subjects with specific attributes and characteristics that researchers have chosen to study and derive conclusions from (7). This study's population consisted of new mothers. From January to May 2022, 30 of 55 moms who gave birth at the Rangga Medika Clinic experienced postpartum hemorrhage.

RESULTS

This study aims to determine the use of Misoprostol and Oxytocin in the Management of Post Partum Hemorrhage. The number of respondents in this study were 30 respondents taken on November 7, 2022. Based on the research results, the value of the respondent's data based on the age of the majority of respondents was Resti 24 people (80.0%). Respondent data based on blood volume more than 500 cc there were 7 respondents (23.3%), less than 500 cc, namely 23 people (76.7%).

Table 1. Characteristics of Respondents Based on Parity

No	Gender	Frequency	Percent (%)
1	Primipara	8	26,7 %
2	Multipara	22	73,3 %
Total		30	100 %



Based on the results of the study, it was found that from the data table 1 above the value of the respondent's data based on parity, the majority of respondents were multipara, 22 people (73.3%)

Table 2. Characteristics of Respondents by Age

No	Age	Frequency	Percent (%)
1	No Resti	6	20,0 %
2	Resti	24	80,0 %
Total		30	100 %

From the data table 2 above, the value of the respondent's data based on the age of the majority of respondents is Resti, 24 people (80.0%)

Table 3. Normality Test

Dependent Variable	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Use of Misoprostol and Oxytocin	.140	30	.139	.953	30	.198
	.140	30	.135	.951	30	.176

Table 4. Dependent T-Test Table

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Table 4 Pair 1 Dependent T-Test Table	15.167	8.952	1.634	11.824	18.510	9.279	29	.000

Table 4 shows that all data groups based on the normality test have fulfilled the requirements because the significant values of Kolmogorov-Sminorvaa Yes are 0.139 and No are 0.135, the significant values of Shapiro-Wilk Yes are 0.198 and No are 0.176, or among all the normality values of the data obtained > 0.05 and stated that the data is normal to continue testing using the Dependent T-Test.

The purpose of this study is to see how successful Misoprostol and Oxytocin are in the treatment of postpartum hemorrhage at the Rangka Medika Cikampek Clinic in Karawang Regency in 2022. It took place

from October 27 to November 27, 2022. Changes in Postpartum Bleeding Before and After Misoprostol and Oxytocin Administration The results of the postpartum bleeding change test with misoprostal and oxytocin using the paired samples t-test revealed a significant value of 0.000 (0.05). (8)These findings indicate that there were differences in postpartum hemorrhage before and after misoprostol and oxytocin administration. Misoprostol's molecular name is 15-deoxy-16-hydroxy-16-methyl PGE1. As a uterotonic, oxytocin is used to stimulate regular myometrial contractions in the induction of term labor

or incomplete abortion, the avoidance of postpartum hemorrhage, and the commencement of nursing. Oxytocin is a cyclic peptide of the hormone oxytocin, which is produced naturally by the posterior pituitary gland (9).

DISCUSSION

a. Parity

According to the study's findings, the majority of respondents were multiparas, with 22 people (73.3%), and primiparas, with 8 persons (26.7%). According to the findings of a study conducted by Suryati et al (2012), 12 people (60.0%) were generally 20-35 years old, 5 people (25.0%) were >35 years old, and 3 people (15.0%) were under the age of 20. According to the 20 respondents' parity, the majority had multipara parity (12 people (60.0%), primipara parity (7 people (35.0%), and grandemultipara parity (1 person (5.0%). It was determined that the majority of the responders who suffered bleeding were multipara.

b. Age

According to the study's findings, the data on respondents based on the age of the majority of respondents were 24 resti (80.0%) and 6 individuals (20.0%) not. At the age of 20, there is a substantial risk of pregnancy, endangering both the mother and the baby's safety. This is due to the reproductive organs' young age, and their physiological functions are not optimal, and psychologically and psychologically mature enough have not been achieved, affecting pregnancy acceptance, which will ultimately have an impact on the process of pregnancy, childbirth, and the postpartum period. According to (10,11), the majority of the respondents were of a healthy reproductive age between the ages of 20 and 35 years, with high risk pregnancies (KRT) occurring after that age. The pelvis is not perfect in women under the age of 20, and women over the age of 35 are at danger of postpartum hemorrhage.

CONCLUSION

The limits of the research related to the research design employed and the characteristics of the sample utilized will also be reviewed in relation to the implications of the research results for services and research from the research previously mentioned in the previous chapter. The purpose of this study is to see how successful Misoprostol and Oxytocin are in the treatment of postpartum hemorrhage at the Rangga Medika Cikampek Clinic in Karawang Regency in 2022. It lasted from October 27 to November 27 of 2022.

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