

Factors Associated With The Occurrence Of Sectio Caesarea Delivery In The Hospital Dr. Agoesdjam Ketapang, 2022

Vika Aprianti^{1*}, Sukarni Setia Ningsih²

^{1,2} STIKES Abdi Nusantara Jakarta, Indonesia

*Corresponding Author:

Email : vikaaprianti44@gmail.com

Abstract

Usually, doctors recommend vaginal or cesarean delivery if the pregnancy is at risk. causes of a cesarean section carried out for indications of the mother or fetus, including: history of cesarean section if the distance between pregnancy and birth is less than 2 years, the birth process is not progressing, the fetal position is flat, the size of the baby's head or body is too large for normal delivery, the mother has other problems. health problems that put you at risk, such as high blood pressure, diabetes or heart disease, mothers with health conditions that put you at risk, such as genital herpes or HIV, quoted from the NHS website, mothers of small children because they often have a small pelvis, have had surgery past cesarean delivery, had problems with the placenta, such as placenta previa or placenta previa, baby's umbilical cord problems, babies with birth defects, twin pregnancies, triplets or more, babies in the womb with health problems, such as hydrocephalus or uterine fibroids, mother with uterine problems or fibroids blocking the cervix (cervix). This research is a descriptive study and the data used in this study is secondary data from the medical records of patients who underwent caesarean sections at Dr Agoesdjam Ketapang Hospital in 2022. Based on the results of multivariable analysis, it is known that the factor most related to the number of caesarean sections is the number of births with a p-value of 0.000 (p-value <0.05), with a standard deviation of 14.05. In other words, it can be concluded that the more negative the birth history, the higher the caesarean section rate.

Keywords : Childbirth, Sectio Caesarea and Hospital.

I. INTRODUCTION

Childbirth is the process of expelling the products of conception or what is commonly referred to as a fetus or baby in the womb. The process can be a happy thing because it is the end of 9 months of waiting. But it can also be both scary and tiring because the process requires a lot of patience. (Rizal Fadli, 2022) Every woman wants her birth process to run smoothly so that she can give birth to a perfect baby. There are two types of delivery: vaginal delivery, also called normal or natural delivery, and caesarean section, which is the operation to remove the baby by making an incision on the skin or the mother's abdomen and uterus. (Rizal Fadli, 2022). Usually, doctors recommend vaginal or cesarean delivery if the pregnancy is at risk. Causes of a cesarean section carried out for indications of the mother or fetus, including: History of cesarean section if the distance between pregnancy and birth is less than 2 years, the labor process is not progressing, the fetal position is flat, the size of the baby's head or body is too large for normal delivery, the mother has other problems. Health problems that put you at risk, such as high blood pressure, diabetes or heart disease, mothers with health conditions that put you at risk, such as genital herpes or HIV, quoted from the NHS website, mothers of small children because they often have a small pelvis, have had surgery past cesarean delivery, had problems with the placenta, such as placenta previa or placenta previa, baby's umbilical cord problems, babies with birth defects, twin pregnancies, triplets or more, babies in the womb with health problems, such as hydrocephalus or uterine fibroids, mother with uterine problems or fibroids blocking the cervix (cervix).

(Karinta, 2021) In 2018, around 303,000 women died during pregnancy and childbirth. Nearly all of these deaths occur in low- and middle-income countries (World Health Organization, 2019). According to the World Health Organization (WHO) the standard for caesarean section for women who give birth by caesarean section (CS) is around 5-15%. According to WHO data, in 2018, 46.1% of all deliveries were performed by caesarean section (CS) (World Health Organization, 2019). Based on RISKESDAS 2018 data, the number of deliveries by caesarean section (SC) in Indonesia is 17.6%. Indications for caesarean section

(CS) due to a number of complications accounted for 23.2% including transverse/ breech fetal position (3.1%), bleeding (2.4%), seizures (0.2%), premature rupture of membranes 2 (5.6%), prolonged labor (4.3%), umbilical cord (2.9%), placenta previa (0.7%), retained placenta (0.8%), hypertension (2.7%), and others (4.6%) (Ministry of Health RI, 2018). According to SKDI data (Indonesian Health and Demographic Survey) in 2017, the number of deliveries in Indonesia by caesarean section (SC) is 17% of all deliveries in health facilities. This indicates an increase in the number of caesarean births (CS). (Ministry of Health RI, 2017)

II. METHODS

This study used a cross-sectional or cross-sectional design which could show a relationship between the independent and dependent variables, but not a causal relationship. The data used in this study were secondary data from the medical records of Dr Agoesdjarm Hospital. Initially, the researcher wanted to test several variables, but by the time data collection became available, it was not as complete as expected. Analytical variables were collected from patient medical records. Medical records as a source of data use handwriting, sometimes unclear, causing difficulties for researchers, so great care and effort is required when reviewing documents. In addition, in this study the data collection process was carried out by selecting the variables to be analyzed. During data collection, the authors were assisted by medical archive officers. Based on the purpose of conducting research is to determine the factors associated with the rate of caesarean section in RSUD Dr. Agoesdjarm through the distribution and relationship of the independent variables with the dependent variable. The analysis used in this study is as follows:

1. Univariate analysis

Univariate analysis of this data was used to determine the frequency distribution and percentage of each variable studied for the dependent and independent variables. Analysis with software (Ms. Excel)

2. Multivariate Analysis

Multivariate data analysis is a set of statistical models that examine multidimensional data patterns by considering several data variables simultaneously. This is an extension of two-way data analysis that only considers the two variables in the model. Because multivariate models account for more variables, they can examine more complex phenomena and find data patterns that more accurately represent the real world. (Nurbaiti, 2020).

III. RESULTS AND DISCUSSION

1. Univariate analysis

Table 1. Sectio Caesarea Childbirth by Age

No	Age	F	%
1	Risk	20	54.0
2	No Risk	17	46.0
Total		37	100.0

From Table 5.1 it can be seen that of the 37 mothers interviewed, the majority of mothers had age-related risk factors, as many as 20 mothers (54%) and a small number of mothers had age-related factors. there is no risk as many as 17 respondents (46%).

Table 2. Sectio Caesarea based delivery Parity

No	Parity	F	%
1	Risk	32	86.4
2	No Risk	5	13.6
Total		37	100.0

From Table 2 it is known that of the 37 mothers surveyed, the majority of mothers with the same risk were 32 mothers (86.4%) and some mothers who were not at risk only had 5 mothers. (13.6%).

Table 3. Sectio Caesarea delivery based on birth history

No	Childbirth History	F	%
1	Risk	21	56.7
2	No Risk	16	43.3
Total		37	100.0

From Table 5.3 it can be seen that of the 37 respondents, the majority were mothers with a history of unsafe deliveries as many as 21 respondents (56.7%) and a small number of mothers with a history of safe deliveries totaling 16 respondents. (43.3%).

Table 4. Sectio Caesarea delivery based on non-advancing parturition

No	Partition Not Progressing	F	%
1	Risk	23	62,1
2	No Risk	14	37.9
Total		37	100.0

From table 4 it can be seen that of the 37 respondents, the majority of non-advancing labor were at risk of 23 people (62.1%) and a minority of non-progressive labor were not at risk of 14 people (37.9%)

Table 5. Sectio Caesarea delivery based on premature rupture of membranes

No	Premature rupture of membranes	F	%
1	Risk	29	78.3
2	No Risk	8	21.7
Total		37	100.0

From table 5 it can be seen that of the 37 respondents, the majority of premature rupture of membranes is at risk of 29 people (78.3%) and the minority of premature rupture of membranes is not at risk of 8 people (21.7%).

2. Multivariate Analysis

Table 6. The effectiveness of Sectio Caesarea delivery factors

	Mean	S Dev	p value
Age	5.91	8.80	8,5
Parity	4.52	14.05	0.00
Childbirth History	3.83	8.95	8.00
Unable Partition	3.86	9.46	7.00
Premature rupture of membranes	4.45	12.22	4.00

From Table 5.2 it can be seen from the available factors that parity is a significant factor with a p value of 0.000 (p value <0.05), with a standard deviation of 14.05

DISCUSSION

Based on the results of multivariate analysis, it is known that the factor most related to the number of caesarean sections is the number of births with a p-value of 0.000 (p-value <0.05), with a standard deviation of 14.05. In other words, it can be concluded that the more negative the birth history, the higher the caesarean section rate. The results of Dila's research (2022) show that the factor most related to the caesarean section rate is the birth history variable with a significance value of 0.000 (p-value <0.05), the coefficient B value of 11.555 which is positive. The researcher's assumption is that there are many factors that cause sectio caesarea deliveries. But in every hospital the dominant factor is different. This is caused by the conditions of each region.

IV. CONCLUSION

Based on the results of the research and discussion in the previous chapter, several conclusions can be drawn as follows:

1. The majority of ages have a risk of disease of up to 54% and a minority of mothers with age factors do not have a risk of disease of up to 46%, the majority of mothers have an age of at risk of 86.4% and a minority has no risk of 13.6%, most mothers have a history of unsafe delivery 56.7% and a small number of mothers had a history of safe delivery 43.3%, most women without delivery had a risk of 62.1% and a small proportion of mothers with late premature membranes had no risk of 37.9% and most Premature rupture of membranes has a risk of 78.3% and a small proportion of premature rupture of membranes is not at risk. 21.7% chance.
2. Based on the results of multivariate analysis, it is known that the factor most related to the number of caesarean sections is the number of births with a p-value of 0.000 (p-value <0.05), with a standard deviation of 14.05. In other words, it can be concluded that the more negative the birth history, the higher the caesarean section rate.
3. The researcher's assumption is that there are many factors that cause sectio caesarea deliveries. But in every hospital the dominant factor is different. This is caused by the conditions of each region.

REFERENCES

- [1] Alim, Z. (2016). Factors Influencing Premature Rupture of Membranes in Trimester III Pregnant Women at Aid Lawang Hospital. *Journal of Health* vol 4 No 1.
- [2] Arman, S. R. (2017). Factors Associated with the Choice of Sectio Caesarea Delivery Method at Agung Jakarta Hospital for the Period November 2016-October 2017, *Journal of Healthcare Technology and Medicine* Vol. 8 No. 1 April 2022, University of Ubudiyah Indonesia, e-ISSN : 2615-109X
- [3] Harahap, Arman ,2018, Macrozoobenthos diversity as bioindicator of water quality in the Bilah river, Rantauprapat, Medan. *J. Phys.:* Conf. Ser. 1116 052026.
- [4] Aisya, M. W., Rauf, E. L., & Ahaya, J. (2018). The Relationship between Straining Technique and Perineal Rupture in Maternal Birth at the Tibawa Health Center, Gorontalo District. Muhammadiyah University Faculty of Health Sciences, 1–14.
- [5] Annisa, V. Y., Kurniati, Y. P., Pramuningtyas, R., & Raharja, S. (2021). Effect of Perineal Massage on Perineal Rupture: A Systematic Review. *Urecol*, 1(1), 178–184. <http://repository.urecol.org/index.php/proceeding/article/view/1320/1287>
- [6] A. Harahap, P. Hrp, N.K.A.R. Dewi, Macrozoobenthos diversity as anbioindicator of the water quality in the River Kualuh Labuhanbatu Utara, *International Journal of Scientific & Technology Research*, 9(4), 2020, pp. 179-183.
- [7] Damanik, S., & Siddik, N. (2018). Correlation between Maternity Characteristics and Perineal Rupture at the Hj. Nirmala Sapni Krakatau Pasar 3 Medan. *Journal of Community Midwives*, 1(2), 95. <https://doi.org/10.33085/jbk.v1i2.3967>
- [8] Devi Kurniasari1, F. A. (2018). Relationship between Age, Parity and Diabetes Mellitus in Pregnancy with the Incidence of Preeclampsia in Pregnant Women in the Working Area of the Rumbia Health Center, Central Lampung Regency, *Indonesian Journal of Midwifery*. 9.
- [9] A. Harahap, et, all, Macrozoobenthos diversity as anbioindicator of the water quality in the Sungai Kualuh Labuhanbatu Utara, *AACL Bioflux*, 2022, Vol 15, Issue 6.
- [10] Dian Indahwati Hapsari, T. H. D. I. H., & Hendraningsih, T. (2018). Determinant Increasing the Incidence Rate of Sectio Caesarea in Maternity Mothers at Ade Muhammad Djoen Hospital, Sintang District. *Journal of Midwives* vol. 5 No. 2.
- [11] Duma Sari Lubis. (2018). Relationship between Mother's Knowledge and History of Sectio Caesarea (Sc) Delivery at Rsia Norfa Husada Bangkinang in 2018. *Journal of Midwifery Health* Vol. 2 No. 2.
- [12] Harahap, Arman. 2020. Species Composition & Ecology Index Of The Family Gobiidae At The Mangrove Belawan Of *Sicanang Island International Journal of Scientific & Technology Research* Volume 9, Issue 04, April 2020.
- [13] Husada, A. R. P. P. K. B. P., & Iryadi, R. (2019). Factors Influencing Labor by Sectio Caesaria (Sc) in Maternity, , *Journal of Healthcare Technology and Medicine*

- [14] Karinta Ariani Setioputri (2021), Caesarean Section, Options for Other Delivery Procedures for Certain Conditions, Hellosehat.com (downloaded August 2, 2022)
- [15] Nurbaiti (2020) Multivariate Analysis, E Library, University of Malahayati (downloaded 10 October 2022)
- [16] Wan, A. (2017). Correlation between Parity and Sc History with the Incidence of Placenta Previa at Arifin Achmad Hospital Pekanbaru, *Journal of Healthcare Technology and Medicine*
- [17] Harahap, A., et all (2021), Monitoring Of Macroinvertebrates Along Streams Of *Bilah River International Journal of Conservation Sciencethis link is disabled*, 12(1), pp. 247–258.
- [18] Handayani, S., & Triwahyuni, Y. (2016). The Relationship of Pressing Position with Perineal Rupture in Maternity Mothers. *Journal of Midwifery*, 8(02), 193–200. <https://doi.org/10.35872/jurkeb.v8i02.220>
- [19] Norhapifah, H. (2017). The Influence of Lateral and Half-Sitting Maternity Positions on Perineal Rupture in Kala Ii. Faculty of Health Sciences, University of 'Aisyiyah Yogyakarta. http://digilib.unisayogya.ac.id/2402/1/NASPUB_HESTRI
- [20] Nurpadayani, S. (2017). Factors Associated with Perineal Rupture in Normal Childbirth at Bhayangkara Hospital Makassar 2016. *Media Midwife*, 2(1), 40–49.
- [21] Sagita, Y.D. (2018). Midwifery Journal | ARTICLE INFO ABSTRACT. *Midwifery Journal*, 3(1), 16–20.
- [22] Mamangkey, J., Suryanto, D., et all (2021). Isolation and enzyme bioprospection of bacteria associated to *Bruguiera cylindrica*, a mangrove plant of North Sumatra, Indonesia, *Biotechnology Reports*, 2021, 30, e00617.
- [23] Tarelluan, J., Adam, S., & Tombokan, S. (2017). Analysis of Factors Associated with Perineal Rupture in Normal Delivery at RSUD Dr. Sam Ratulangi Tondano, Minahasa Regency. *Midwife Scientific Journal*, 1(1), 90881.
- [24] Wiliyana Dila, Thomson P Nadapda, Jitasari Tarigan Sibero, Fatma Sylvana Dewi Harahap, Ivansri Marsaulina (2022), Factors Associated with Sectio Caesarea Delivery January 1 - December 2019 at RSU Bandung Medan, *Journal of Healthcare Technology and Medicine* Vol. 8 No. 1 April 2022, University of Ubudiyah Indonesia, e-ISSN : 2615-109X
- [25] Susanto, Y. P. (2019). Factors Associated with the Management of Sectio Caesarea Labor at Tk Hospital. Ii Pelamonia Makassar in 2019. *Journal of Midwifery* vol. 3 No. 1.