



INDICATIONS OF AN INCREASE IN THE INCIDENT OF CAESAREA SECTIO IN THE IHC LAVALETTE HOSPITAL, MALANG CITY

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Abstract

Caesarean section confinement method is one of the alternatives for confinement. The purpose of this study was to determine what indications are related to the increasing incidence of caesarean sections at Lavalette Hospital. The type of research used in this study is descriptive research, with a cross-sectional design. The population in this study were all used as samples totaling 69 mothers giving birth. Data collection in this study used primary data by giving questionnaires to patients giving birth. Analysis was carried out using univariate, bivariate and multivariate tests. The results of the study showed that 32 (46.4%) were included in the criteria for performing a caesarean section, there was an indication of a relationship between gestational age, premature rupture of membranes (PROM), preeclampsia, breech position and prolonged labor with cesarean section procedures in mothers giving birth at Lavalette Hospital, Malang. The result of the analysis of sectio caesarea indication showed that caesarean section was the dominant indication for procedures at Lavalette Hospital, Malang, with a p-value of $0.000 < 0.0005$ and the highest Odds Ratio value of 92. This means that mothers who experience have a 92-fold greater chance of undergoing a caesarean section compared to other variables.

Keywords: Indicatios , Increase, SectioCaesarea

INTRODUCTION

Every woman wants her labor to go smoothly and to give birth to a perfect baby. There are two ways of giving birth, namely vaginal birth, which is better known as natural birth, and caesarean section or caesarean section, which is an operation to remove the baby through an incision in the abdominal wall and uterine wall provided that the uterus is intact and the fetus weighs above 500 grams (Matsubayashi & Tanaka, 2014).

Caesarean section is the best choice for medical personnel to save the mother and fetus if there are abnormalities in the pregnancy. There are several indications for carrying out a caesarean section, namely fetal distress, cephalopelvic disproportion, labor not progressing, placenta previa, umbilical cord prolapse, malpresentation of the fetus/latitudinal position, narrow pelvis and preeclampsia, without medical indications (Matsubayashi & Tanaka, 2014).

World Health Organization (WHO) data shows that enhancement labor with SC methods in Asian countries occurred in 2007-2008 , namely 110,000 per birth life . According to WHO, Prevalence labor with SC in 2017 it increased by 21% drastically in 2018 became as much as 23%, and in 2015 it was 27% and in 2020 it reached as much as 31%. This figure more big from China which only (3.9%) acts CS delivery . This figure exceed from decision sectio Caesarea is ideal for a country is 515%. Riskesdas results in 2017 figures labor cesarean Indonesia by 17.2 % , 2018 shows birth with method SC deliveries in Indonesia amounted to 17.6% of all over amount birth (Putra et al., 2021).

Based on 2020 RISKESDAS data , total labor with Sectio Caesarea (SC) method in Indonesia is 17.6% and in 2021 the figure the incidence of SC increased by 19% (

Viandika & Septiasari, 2020). 2019 riskesdas data shows birth with labor caesarean section in East Java Province in 2018 amounted to 22.36 % all over childbirth, childbirth *caesarean* in 2019 it was 30.12% of the total increased births from in 2020 it was 38.59%, figure this also exceeds the number limit labor *caesarean* determined by WHO (Qudrotunanda & Chamid, 2023). Amount patient Mother giving birth is carried out SC procedure at IHC Lavalette Hospital every the year always increased, started from in 2020 there were 113 patients, in 2021 there were 139 patients and in 2022 there were 155 patients and in 2023 there were 170 patients Mother give birth to with SC action.

Labor sectio caesarean (SC) can done Because various reason or possible problems originate from Mother or baby. There are two types decision in implementation CS delivery. First, the decision has been made diagnosed or planned previously. Reason from party baby covers imbalance size head baby with pelvis mother, abnormality position baby, placenta previa, baby very large size, and pregnancy twin. Reason from party Mother including pregnancy in the mother aged further, preeclampsia-eclampsia, history surgery caesarean before, illness particular sufferer mother, and infection channel labor. Second, the decisions taken in a way sudden Because condition emergency like prolonged labor, amniotic fluid broken early, contractions weak, serious fetus, and so on.

Risk factors experienced Mother moment give birth to or undergo operation sectio caesarean includes: amniotic fluid broken early (13.4%), preeclampsia (5.49%), bleeding (5.14%), abnormalities location fetus (4.40%), road born closed (4.25%), and torn uterus (2.3%). Of the *caesarean section deliveries*, around 13.9% were requests for *caesarean section* which were carried out without medical consideration (Yuhana et al., 2022).

Based on 2020 RISKESDAS data, total labor with Sectio Caesarea (SC) method in Indonesia is 17.6%. Indication he did labor Sectio Caesarea (SC) is caused by several complications with percentage amounting to 23.2% of them position fetus transverse / breech (3.1%), bleeding (2.4%), seizures (0.2%), amniotic fluid broken early (5.6%), late labor (4.3%), convulsion rope central (2.9%), placenta previa (0.7%), placenta underdeveloped (0.8%), hypertension (2.7%), and others (4.6%) (Ameliah et al., 2022).

A number of indication For Performing a Caesarean Section includes factor age, which can be increase risk complications during pregnancy and childbirth Because tool reproduction yet mature, like the pelvis and uterus are still intact small. Women aged ≤ 16 years and ≥ 35 years own amount more maternal complications tall compared to with primigravida aged 20-35 years. Risk on parity high too endanger fetus and mother, because womb become the more weak consequence pregnancy repeated, which can be cause complications during pregnancy and childbirth (Amir & Yulianti, 2020).

Based on background behind the researcher interested For do research entitled " Indications of an Increase in the Rate of Sectio Caesarea at IHC Lavalette Hospital". Study This done For know indication What only that is related with increasing number SC incident at IHC Lavalette Hospital.

RESEARCH METHODS

Research methods contains mix method , type study This is study descriptive with cross-sectional design . The research was conducted at IHC Lavalette Hospital, Malang in March-May 2024. The sampling type was total sampling. The sample for this research was all mothers giving birth at IHC Lavalette Hospital in March-May 2024, the total sample was 69 people. Announcement of data using questionnaire form interview .

Analysis used is univariate , bivariate , and multivariate . Bivariate data analysis using the Chi Square test with nominal data scale . Next with analysis Multivariate using regression testing logistics For analyze connection indications for Sectio Caesarea with increase number incident sectio caesarean in a way simultaneous . Ha accepted if the p-value < 0.05 which means There is significant relationship .

RESEARCH RESULT

Table 1
Characteristics respondents based on age Mother gave birth at IHC Lavalette Hospital

Characteristics	Criteria	n	%	Average
Mother's Age	At risk <20 years >35 years	15	21.7	30.7
	No Risk 20-35 years	54	78.3	
	Total	69	100	
Parity	At risk (P1 and ≥4)	7	10.1	2
	No Risk (P1 and 3)	62	89.9	
	Total	69	100	

Source : Data processed in 2024

From a total of 69 mothers giving birth at HC Lavalette in March-May 2024, as many as 15 (21.7%) including in age At risk <20 years >35 years . 54(78.3%) mothers giving birth enter in No risk criteria 20-35 years . Distribution results frequency characteristics respondents based on age Mother This including in range meaningful 1-25% analysis part small from incident that is as many as 15 (21.7%) mothers maternity at IHC Lavalette Hospital in March -May 2024 incl in criteria At risk <20 years >35 years .

Frequency of mothers giving birth based on parity at IHC Lavalette Hospital in March-May 2024. Of the total 69 mothers giving birth at HC Lavalette in March-May 2024, 7 (10.1%) were at risk (P1 and ≥4). Meanwhile, 62 (89.9%) mothers who gave birth fell into the No Risk parity criteria (P1 and 3). The results of the frequency distribution of respondents' characteristics based on the parity of mothers giving birth are included in the analysis range of 1-25%, which means that a small portion of the incidents, namely 7 (10.1%) mothers giving birth at IHC Lavalette Hospital in March-May 2024 are included in the criteria At risk (P1 and ≥4).

Table 2
Frequency distribution of mothers giving birth based on indications of an increase in the incidence of caesarean section at IHC Lavalette Hospital

Month	S.C		Normal		Total
	n	%	N	%	
May	9	56.25	12	57.14	21
April	13	46.43	15	53.57	28
March	10	50.00	10	50.00	20
Total	32		37		69

Source : Data processed in 2024

Distribution results frequency indication enhancement number incident sectio caesarea at IHC Lavalette Hospital, in March 2024 there will be 10 (50%) procedures *sectio caesarea* , in April 2024 there were 13 (46.43%) procedures *sectio caesarea* , in May 2024 there were 9 (56.25%) procedures *sectio caesarean* .

Table 3
Distribution Frequency indication number incident *sectio caesarea* at IHC Lavalette Hospital March -May 2024

Indikasi	Kriteria	n	%
Usia Kehamilan	usia kehamilan ≤ 37 atau > 42 minggu	4	5,8
	usia kehamilan >37 sampai 42 minggu	65	94,2
	Total	69	100
KPD	Ya	24	34.8
	Tidak	45	65.2
	Total	69	100
Preeklamsia	Ya	12	17.4
	Tidak	57	82.6
	Total	69	100
Letak Sungsang	Ya	20	29.0
	Tidak	49	71.0
	Total	69	100
Partus Lama	Ya	17	24.6
	Tidak	52	75.4
	Total	69	100

Source : Data processed in 2024

Distribution table frequency Mother giving birth based on indication age pregnancy at IHC Lavalette Hospital month MarchMay 2024. From a total of 69 mothers giving birth at HC Lavalette in 2024, as many as 4 (5.8%) included in criteria age pregnancy ≤ 37 or > 42 weeks . Meanwhile, 65 (94.2%) mothers who gave birth fell into the gestational age criteria of >37 to 42 weeks. Results of frequency distribution of respondent characteristics based on gestational age indication at IHC Lavalette Hospital in March-May 2024, this is included in the analysis range of 1-25%, which means that a small portion of the events, namely 4 (5.8%) are included in the criteria for gestational age ≤ 37 or > 42 weeks.

Table of frequency distribution of mothers giving birth based on KPD indications at IHC Lavalette Hospital in March-May 2024. Of the total 69 mothers giving birth at

HC Lavalette in March-May 2024, 24 (34.8%) were included in the criteria for experiencing PROM. Meanwhile, 45 (62.5%) mothers who gave birth fell into the criteria of not experiencing PROM. Results of frequency distribution of respondent characteristics based on KPD indications at IHC Lavalette Hospital in March-May 2024, this is included in the analysis range of 26-49%, which means that almost half of the incidents, namely 24 (34.8%) are included in the KPD criteria.

Table of frequency distribution of mothers giving birth based on indications of pre-eclampsia at IHC Lavalette Hospital in March-May 2024. Of the total 69 women giving birth at HC Lavalette in March-May 2024, 12 (17.4%) were included in the criteria for experiencing pre-eclampsia. Meanwhile, 57 (82.6%) mothers who gave birth fell into the criteria of not experiencing pre-eclampsia. Results of frequency distribution of respondent characteristics based on indications of pre-eclampsia at the IHC Lavalette Hospital in March-May 2024, this is included in the analysis range of 1-25%, which means that a small portion of the incidents, namely 12 (17.4%) mothers who gave birth were included in the criteria for pre-eclampsia.

Table of frequency distribution of mothers giving birth based on indication of breech position at the IHC Lavalette Hospital in March-May 2024. Of the total of 69 women giving birth at the IHC Lavalette Hospital in March-May 2024, 20 (29%) were included in the criteria for experiencing a breech position. Meanwhile, 49 (71%) mothers who gave birth fell into the criteria of not having a breech position. Results of frequency distribution of respondents' characteristics based on indication of breech location at IHC Lavalette Hospital in March-May 2024, this was included in the analysis range of 26-49%, which means that almost half of the incidents, namely 15 (20.55%) were included in the breech location criteria.

Table of frequency distribution of mothers giving birth based on indications of prolonged labor (longitudinal second stage) at IHC Lavalette Hospital in March-May 2024. Of the total 69 mothers giving birth at HC Lavalette in March-May 2024, 17 (24.6%) were included in the criteria experiencing prolonged labor (lengthened second stage). Meanwhile, 52 (75.4%) mothers who gave birth fell into the criteria of not experiencing prolonged labor (long second stage). The results of the frequency distribution of respondents' characteristics based on indications of prolonged labor (longitudinal second stage) at IHC Lavalette Hospital in March-May 2024 are included in the analysis range of 1-25%, which means that a small portion of the events, namely 17 (24.6%) are included in the criteria. prolonged labor (lengthened second stage).

Table 4
Analysis Bivariate variable age pregnancy , PROM, preeclampsia , location breech , and prolonged labor with *sectio caesarean*

		Sectio Caesarea				p-value	OR	IK95%	
		Ya		Tidak				Min	Max
		n	%	n	%				
Usia Kehamilan	Berisiko	4	5,8	0,0	0	0,04	2,3	1,7	3
	Tidak Bersiko	28	40,6	37	53,6				
KPD	KPD	23	33,3	1	1,4	0,00	92	10,9	77
	Tidak KPD	9	13,0	36	52,2				
Preeklamsia	Preeklamsia	12	17,4	0	0,0	0,00	2,8	2	4
	Tidak Preeklamsia	20	29,0	37	53,6				
Letak Sungsang	Sungsang	20	29,0	0	0,0	0,00	4	2,4	6,6
	Tidak Sungsang	12	17,4	37	53,6				
Partus Lama	Partus Lama	17	24,6	0	0,0	0,00	3,4	2,2	5,3
	Tidak	15	21,7	37	53,6				

Source : Data processed in 2024

Based on table 4 Indications action *Sectio Caesarea* in mother giving birth at IHC Lavalette Hospital Malang is age pregnancy , PROM, preeclampsia , location breech and prolonged labor , supported with shi -square test results with mark *p-value* is $0.000 < 0.05$ for each indication the .

Table 5
Analysis Multivariate

	B	S.E	Wald	df	Sig.	Exp(B)	95% Cifor EXP(B)	
							Lower	Upper
Age Steps								
1^a Pregnancy (1)	-692	17722.45	1.00	1	,000	2,3	1.7	3
KPD(1)	21,521	4533.845	,996	1	,000	92	10.9	77
Pre - eclampsia (1)	39,678	9867.794	,997	1	,000	2.8	2	4
Location Breech (1)	38,751	8135.080	,996	1	,000	4	2,4	6.6
Parturition Old(1)	17,552	7930.914	,998	1	,000	3,4	2,2	5.3
Constant	20,422	4533.845	,996	1	,000	740007063.97		

Source : Data processed in 2024

Based on table 5, the variables related to *the Sectio Caesarea* action are age pregnancy , PROM, preeclampsia , location breech , and prolonged labor . Strength connection can seen from OR value . Strength connection largest and smallest are KPD (OR=92) and Age pregnancy (OR=2.3).

Table 6

Step	Chi-square	df	Sig.
1	,000	4	1,000
2	,000	3	1,000
3	,000	4	1,000

Hosmer and Lemeshow Test

Source : Data processed in 2024

Based on Table 6 Hosmer and Lemeshow test results obtained chi-square value of 0.00 with level significance of 1,000. The test results show that mark probability (P-value) ≥ 0.05 (value significant) namely $1,000 \geq 0.05$, then H_0 is accepted . This matter indicated that No There is difference significant between the model and the data so that it is a regression model in study This worthy and capable For predict mark his observations .

Table 7
Areas Under the Curve

Areas	Std. Error ^a	Asymptotic Sig. ^b	Asymptotic 95% Confidence Intervals	
			Lower Bound	Upper Bound
,997	,003	,000	,991	1,000

Source : Data processed in 2024

Based on Table 7 Known discrimination values with evaluate the area under the curve (AUC) value is of 99.7%. This value is included in the very strong category (>90%-100%).

Table 8
Results of Multivariate Logistic Regression Analysis

	Coefficient	Wald	Df	Sig.	OR	IK95%	
						Min	Max
Age Pregnancy	-692	1.00	1	,000	2,3	1.7	3
KPD	21,521	,996	1	,000	92	10.9	77
Pre eclampsia	39,678	,997	1	,000	2.8	2	4
Breech location	38,751	,996	1	,000	4	2,4	6.6
Long Parturition	17,552	,998	1	,000	3,4	2,2	5.3

Source : Data processed in 2024

Based on table 8 analysis indication age pregnancy , PROM, preeclampsia , location breech and prolonged labor action *Sectio Caesarea* in mother giving birth at IHC Lavalette Hospital Malang shows very strong value . Supported with mark *the area under the curve* (AUC) is of 99.7%. Research result shows that KPD is the most dominant indication to action *Sectio Caesarea* at IHC Lavalette Hospital Malang because own The p-value is $0.000 < 0.005$ and has highest OR value namely 92 which means Mother births that experience PROM are 92 times more likely experience *Sectio Caesarea* compared to other variables .

DISCUSSION

Indication Age pregnancy , PROM, preeclampsia , location breech and prolonged labor action *Sectio Caesarea* in mother giving birth at IHC Lavalette Hospital Malang shows very strong value . Supported with mark *the area under the curve* (AUC) is of 99.7%. Where p This means Age pregnancy , PROM, preeclampsia , location breech and prolonged labor can occur become indication a doctor taking *Sectio Caesarea* on the mother gave birth at IHC Lavalette Hospital Malang.

Research result shows that KPD is the most dominant indication to action *sectio caesarea* at IHC Lavalette Hospital Malang because own The p-value is $0.000 < 0.005$ and has highest OR value namely 92 which means Mother births that experience PROM are 92 times more likely experience *Sectio Caesarea* compared to other variables .

Research result This in line with Wilda & Suparji's research (2020) states that KPD is one of them complicate in Pregnancy and childbirth play a role in increase possible perinatal maternal morbidity and mortality caused by existence infection , that is Where membrane amniotic fluid that becomes barrier entry germs reason infection Already No There is so that can endanger for mother and fetus . Risk delivery to the mother with amniotic fluid broken early very tall Because can threaten safety mother and fetus . so need done optimal effort for lower incident the that is end pregnancy with action *sectio caesarean* If within 24 hours no can resolved with labor vaginal .

Yanti (2023) states that number incident labor with SC actions amounted to 17% of the total number birth in a health facility due to because of KPD. This matter prove

there is enhancement number CS delivery with KPD indication is 13.65% and the remainder caused by other factors including ie abnormality location of the fetus , PEB, and history of CS. One of indication done action *Sectio Caesarea* is Amniotic fluid Premature Rupture .

Maryani's research (2017) states that premature rupture of membranes increases the risk of needing a caesarean section. This condition can cause complications such as infection in the mother or newborn baby, premature labor, lack of oxygen due to pressure on the umbilical cord, and fetal deformities. All of these factors can hinder normal delivery and ultimately make a cesarean section more likely. Premature rupture of membranes also increases the risk of infection during labor, including intrapartum infection, puerperalis, peritonitis, and septicemia. Infection is more common in preterm labor and increases with the length of time since the membranes ruptured. Therefore, caesarean section is often considered the appropriate treatment.

Research shows that premature rupture of membranes is a condition in which the amniotic fluid breaks prematurely, often before labor begins. This can increase the risk of infection because the amniotic fluid that usually protects the baby from bacteria is no longer there. In addition, the baby can experience stress because the oxygen supply is reduced, especially if the umbilical cord is compressed. Premature rupture of membranes also often occurs before the baby is full term, meaning the baby may be too weak to be born naturally. For these reasons, doctors often decide to perform a caesarean section so that the baby can be delivered quickly and safely and avoid serious complications for both mother and baby.

CONCLUSION

Conclusion The research results showed that out of a total of 69 mothers giving birth at IHC Lavalette in March-May 2024, 32 (46.4%) met the criteria for having a *caesarean section* . Indications for *Sectio Caesarea procedures* in mothers giving birth at IHC Lavalette Hospital in Malang are gestational age, PROM, preeclampsia, breech position and prolonged labor, supported by the results of the Shi-square test with a *p-value* of $0.000 < 0.05$ for each of these indications. . Analysis of indications of gestational age, KPD, preeclampsia, breech position and prolonged labor on *Sectio Caesarea procedures* for women giving birth at the IHC Lavalette Malang Hospital showed very strong values. Supported with mark *the area under the curve* (AUC) is of 99.7%. Research result shows that KPD is the most dominant indication to action *Sectio Caesarea* at IHC Lavalette Hospital Malang because own The *p-value* is $0.000 < 0.005$ and has highest OR value namely 92 which means Mother births that experience PROM are 92 times more likely experience *Sectio Caesarea* compared to other variables .

BIBLIOGRAPHY

- Agustina, K., Ningrum, P., Lutfiana, I., Tinggi, S., & Health, I. (2023). *Risk factors for preeclampsia in women giving birth at Rsu Parama Sidhi Singaraja* . 8 , 20–25.
- Akbar, H. (2021). *Epidemiology of Stunting* . Muhammad Zaini Publishing Foundation.
- Ameliah, R., Sari, EP, & Hamid, SA (2022). Relationship between Fetal Position Abnormalities, Preeclampsia and Premature Rupture of Membranes with Sectio Caesaria at RSUD Dr.
- H. Mohamad Rabain Muara Enim . *Journal Batanghari University Science*

- Jambi , 22 (1), 522. <https://doi.org/10.33087/jiubj.v22i1.1799>
- Amir, F., & Yulianti, S. (2020). Connection Parity and Age To Cesarean section delivery at RSU Bahagia Makassar in 2020. *Pomegranate Pelamonia Health Journal* , 4 (2), 75–84. <https://doi.org/10.37337/jkdp.v4i2.179>
- Basyir, V., & Fauziah, PN (2023). *LYCOPEN FUTURE MEDICINE REDUCES THE RISK OF PREECLAMPSIA* . Widina Publishers.
- Devi, R., Hidayat, M., & Rani, AH (2018). Relationship between Mother's Characteristics and Incidence of Childbirth Complications at Dr. Zainoel Regional General Hospital Abidin Banda Aceh 2016. *Nanggroe Medika Medical Journal* , 1 (3), 15–26.
- Dr. Ekayanti Hafidah Ahmad., SKMMK, Dr. NS. Makkasau, MKMED M., Fitriani, SKMMM, Anita Latifah, SSSHMH, Marlin Eppang, SKNMK, Syahrani Buraerah, SKMMK, Dr. Sri Syatriani, SKM MK, Dr. Widia Shofa Ilmiah., SSTMK, Titik Suhartini, SKNM K., & Lidia Widia, SSTMK (2023). *Health Research Methodology* . RIZMEDIA LIBRARY INDONESIA.
- Fitria, R., Nugraha, ND, Mahanani, SW, Daramatasia, W., Wulaningtyas, ES, Ningsih, MP, Batubara, A., Centis, MCL, Qomariyah, K., & Petralina, B. (2023). *MIDWIFERY EDUCATION* . Get Press Indonesia.
- Fitriani, C., Wisudarti , R., Jufan , AY, & Trijayanti , C. (nd). *JOURNAL OF ASI COMPLICATIONS ANESTHESIA LITERATURE REVIEW Consideration Anesthesia in Section Patients Cesarean with COVID-19* . 77–83.
- H. Anang Setiana , SKMMKMRNSKNMK (2021). *Nursing Research : Lovrinz Publishing* . LovRinz Publishing.
- Hijriani , Rahim, I. and Hengky , HK (2020) ' Characteristics of Maternity Mothers With Sectio Caesarea at the Andi Makkasau Pare-pare Regional General Hospital ' , *Journal scientific humans and health* , 3(2), pp. 257–265
- Irma, I. (2023). *TAKE CARE OF YOUR CHILDREN' fix* (1) (Issue August).
- Juliathi . 2020. Overview of Childbirth With Sectio Caesarea in Installation Bad Emergency Midwifery at Sanglah Denpasar Central General Hospital 2020. *Journal Scientific Midwifery* Vol. 9, No. 1 ISSN:.2721-8864 (Online)
- Karmila, WL, H, PIM, Rosemitha, C., Malini, M., Retnowati, Y., Padillah, R., & Kunci, K. (2023). *Multidisciplinary Science Management of Mother's Amniotic fluid Early Rupture* . 1 (5), 1338–1343.
- Lanny Apriani . (2016). Related Factors With Incident Post Partum Hemorrhage at Dr. Hospital Pirngadi Medan City Period January 2011-June 2015. *Journal Scientific IMELDA Midwifery* , 2 (2).
- Lilis Candra Yanti. 2023. Incidence Rate of Sectio Caesarea with Indication Amniotic fluid Premature Rupture . *Journal Health Sciences* Volume 12 Number 2 DOI: 10.35816/ jiskh.v 12i2.1034
- Mahmudah, RD (2023). Case Study of Pain Management in Women Post Sectio Caesarea using the Benson Relaxation Technique at RSI Muhammadiyah Kendal. *Repository of Muhammadiyah University Kendal Batang* , 1–52.
- Matsubayashi, G. E., & Tanaka, T. (2014). Factors that Play a Role Increasing incidence of cesarean section at Liun Kendage Regional General Hospital

- Tahuna Veibymiaty . *Ejournal of Nursing* , 2 (4), 869–874.
[https://doi.org/10.1016/0584-8539\(74\)80002-4](https://doi.org/10.1016/0584-8539(74)80002-4)
- Maryani., 2017. ' Determinants Labor Section Caesarean section at Wates Kulon Hospital IKMMY "JURNAL OF MULIA MADANI YOGYAKARTA HEALTH SCIENCES" Vol IV No 2 October 2023 Print ISSN: 2721-2122, Online ISSN: 2808-7534 Journal Homepage: <https://jurnal.lppm-mmy.ac.id/index.php/jik>
- Meida , N., & Susanto, E. (2020). *32 Year Old Woman G1P0a0 Uk 38-39 Weeks With Indication Severe Preeclampsia at Srud Dr. Sayidiman Magetan : Case Report* . 2721–2882.
- Mellisa, S. (2021). Risk Factors for Premature Rupture of Membranes. *Harapan Medical Journal* , 03 (01), 402–406.
- Metti, E. (2021). *NURSING CARE FOR PREGNANT WOMEN WITH PREMIUM RUPTURE OF AMNINOS (KPD): Application of Wiedenbach's Need For Help Nursing Theory* . NEM Publishers .
- Mulyawati , I., Azam, M., & Ningrum, DN (2018). Action factors labor operation sectio caesarean . *Pack* , 7 (1), 14–21.
- Mustofa, L.A., & Nuraviah , E. (2020). Effectiveness of Nipple Stimulation In Preventing a Long Second Stage Labor Vaginal . *Proceedings of the Seminar on Research and Community Service Results To the Community* .
- Nikmathul Ali, R., Aprianti A Hiola , F., & Tomayahu , V. (2021). Related Factors Incident Complications Amniotic fluid Premature Rupture (Kpd) at Dr Mm Dunda Limboto Hospital . *Journal of Health Sciences* , 2 (3), 381–393.
<https://doi.org/10.46799/jhs.v2i3.130>
- Mylonas, I., & Friese, K. (2015). Indications for and Risks of Elective Cesarean Section. *Deutsch Arzteblatt international* , 112 (29-30), 489–495.
<https://doi.org/10.3238/arztebl.2015.0489>
- Noviyanti , NI, Gusriani , G., Padlilah , R., Jalilah, NH, Mahayati , NMD, Centis, MCL, Fitria, R., Ariani, D., Ariyanti , R., & Wulaningtyas , ES (2023). *COMPLETE GUIDE FOR PREGNANT WOMEN* . Get Press Indonesia.
- Nurfauziah , R. (2022). With Amniotic fluid Premature Rupture In Room Faculty Nursing . *Bku.Ac.Id* .
- Purba , N. (2022). Description of Knowledge of Pregnant Women in the Third Trimester about Prolonged First Stage of Labor at the Helen Tarigan Clinic In Medan City in 2021. *Healthcaring : Journal Health Sciences* , 1 (2), 9–16.
<https://doi.org/10.47709/healthcaring.v1i2.1265>
- Putra, Ida BGS, Wandia, M., & Harkitasari, S. (2021). Indications for Sectio Caesarea Actions at Sanjiwani Hospital, Gianyar, 2017-2019. *Aesculapius Medical Journal* , 1 (1), 63–64.
- Qudrotunanda , M.I., & Chamid, M.S. (2023). Analysis Relating Variables Caesarean delivery at Ploso Regional Hospital with Regression Model Approach Binary Logistics . *ITS Science and Arts Journal* , 11 (6).
<https://doi.org/10.12962/j23373520.v11i6.87423>
- Rahayu, RS, Mukid, MA, & Wuryandari, T. (2015). Identify factors that relate to the occurrence of preeclampsia using the CHAID method (case study of

- pregnant women in the Jampersal category at Dr. Moewardi Hospital, Surakarta). *Gaussian Journal* , 4 (2), 383–392.
- Rani, P., Chakraborty, MK, Sah, RPRPRP, Subhashi, A., Disna, R., UIP, P., Chaudhary, DP, Kumar, AAAAA, Kumar, RR, Singode, A., Mukri, G., Sah, RPRPRP, Tiwana, US, Kumar, B., Madhav, P., Manigopa, C., Z, AH, Anita, P., Rameshwar, PS, ... Kumar, AAAA
- Saidah, S., & Yusup, N. (2016). Journal midwifery pearl Mahakam volume IV, number 2, September 2016. *Mutiara Mahakam Midwifery Journal* , IV (September), 31–40.
- Setiadi. (2007). *Nursing Research Concepts & Writing* (p. 310). Science House.
- Suciawati , Anni. 2023. Related Factors With the decision of Sectio Caesarea for the Mother in Birth . *Journal Study Nurse Professional Volume 5 Number 1*
- Sugito , A., Ramlan, D., & C1nta, PPR (nd). *Aromatherapy and Acupressure at Sectio Caesarea* . Rumah Cinta Library Publisher .
- Sugiyono . (2019). *Research methods Quantitative Qualitative* .
- Sulastri, S., Destiyani , AD, & Diniyah , UM (2023). Pre- Eclampsia Screening in Pregnant Women Using Mean Arterial Pressure. *Journal of Health* , 16 (2), 176–183. <https://doi.org/10.23917/jk.v16i2.2004>
- Wilda and S. Suparji . 2020. The impact of age and parity factors on the prevalence of premature rupture of membranes in mothers during labor. *Tunas-Tunas Ris Trick. Health* vol. 10, no. 1
- Viandika, N., & Septiasari, RM (2020). The Relationship between Continuity of Care and the Incidence Rate of Sectio Cessarea . *Journal for Quality in Women's Health* , 3 (1), 1–8. <https://doi.org/10.30994/jqwh.v3i1.41>
- Yuhana, Y., Farida, T., & Turiyani, T. (2022). The relationship between premature rupture of membranes, prolonged labor and fetal distress with cesarean section delivery at TK Hospital. IV DR. Noesmir King stone 2020. *Journal Batanghari University Jambi Science* , 22 (1), 78. <https://doi.org/10.33087/jiubj.v22i1.1735>
- Yunri Merida, SSTMK, Ana Setyowati , SSTMTK, Nurma Ika Zuliyanti , SSTBMK, Rif'atun Nisa, MTK, Ika Choirin Nisa, SSTMK, Muhaimin, G., Caraka, LD, Alfiansyah , MR, Himansyah , R., & Jiddan , DSS (2023). *Textbook of First Stage Emergency Childbirth Care* . Mahakarya Citra Utama Group.