

THE INFLUENCE OF ERACS AND NON ERACS SECTIO-CAESAREA DELIVERY METHODS ON EARLY MOBILIZATION TIME OF POST PARTUM MOTHERS

Elsa Nuristiawati Adha*, Nur Anita

STIKES Abdi Nusantara, Jl. Swadaya No.7, Jatibening, Pd. Gede, Bekasi, West Java 17412, Indonesia

*elsanuristiawati95@gmail.com

ABSTRACT

In order to reduce the number of complications and morbidity, several developed and developing countries such as Indonesia began to apply methods that can reduce the risk of complications so that the length of hospitalization and the healing and mobilization process become faster known as the Enhanced Recovery After Cesarean Section (ERACS) method. The purpose of this study was to analyze the effect of the secio operation method on the time of early mobilization start. This research design was of observational resrospective monitoring for 3 years. The location used for this research is in BPM Hj. Nurjanah ST and BPM Nurkholilah STr.Keb Pematang Village, Pematang District, Serang Regency. This research was conducted in May 2023. The samples used in this study used a total sampling of 43 samples. The analysis used is by linear regression test. The conventional secio group (Non ERACS) the average time needed for mobilization was 6.5 hours while in the ERACS secio group the average mobilization time was 2 hours faster which was 4 hours. The results of linear regression analysis obtained p values of $0.003 < 0.05$ which means that the ERACS cesarean cesarean method can accelerate mobilization time in patients and is statistically significant.

Keywords: enhanced recovery after cesarean section (eracs); early mobilization; post partum

INTRODUCTION

According to a World Health Organization (WHO) report, the use of cesarean sections continues to increase globally, now accounting for more than 1 in 5 (21%) of all deliveries. This number will continue to rise over the coming decade, with almost a third (29%) of all births likely to occur by caesarean section by 2030, a significant difference in the prevalence of caesarean sections, depending on which part of the world she lives in. In less developed countries only about 8% of women give birth by caesarean section, whereas in developed and developing countries the prevalence reaches 43% of all births. If this trend continues, by 2030 the highest rates are likely to be in East Asia (63%), Latin America and the Caribbean (54%) and West Asia (50%). (WHO, 2021; Sidharti, 2023).

According to Riskesdas in 2018, the number of deliveries with the Sectio Caesarea method in Indonesia reached 17.6% of the total number of deliveries with the distribution of emergency indications, including: transverse fetal position / sunsang by 3.1%, bleeding by 2.4%, seizures by 0.2%, premature rupture of membranes by 5.6%, old partus by 4.3%, umbilical cord winding by 2.9%, placenta previa by 0.7%, placenta lagging behind by 0.8%, hypertension by 2.7%, and others by 4.6% (Viandika, 2020). The secio action is carried out with the initial goal of saving the mother and baby from complications during childbirth. However, this action also has several negative effects, namely physically causing pain in the dissected abdominal part which has a higher pain level of about 27.3%, much higher when compared to normal delivery which leaves only about 9% pain (Sidharti, 2023). In addition, sectio caesarea will also cause complications such as, puerperal infection, which is a mild complication and is characterized by an increase in body temperature for several days during the puerperium, can also be severe such as peritonitis and sepsis (Munandar,

2018). Even infections that occur after sectio caesaria surgery procedures will also increase morbidity and maternal mortality rates (Cahyaningtyas, 2020)

In order to reduce the number of complications and morbidity, several developed and developing countries such as Indonesia began to apply methods that can reduce the risk of complications so that the length of hospitalization and the patient's healing process become faster, known as the Enhanced Recovery After Cesarean Section (ERACS) method. The initial ERAS protocol focuses on improving pain control, reducing postoperative nausea, vomiting, and early ambulation, so as to reduce the length of hospital stay (Ogunkua, 2021). The ERACS method also has benefits in helping patients perform early mobilization because it can improve lung function, increase oxygen flow to tissues, increase insulin resistance, and reduce the risk of thromboembolism so that patients will enter the recovery period faster (Liu, 2020). The enhanced recovery method was first developed to overcome problems in 3 stages, namely preoperative, intraoperative, and postoperative. In the preoperative period, this method is aimed at reducing perioperative pathophysiological responses and reducing morbidity. In the intraoperative period it is aimed at reducing surgical stress, preventing intraoperative hypothermia, and avoiding the use of blood that is not possible. Including postoperative goals are managing pain, avoiding nausea or vomiting, and early refeeding to avoid ileus (Ogunkua, 2021).

Early mobilization is essential in the patient's postoperative recovery process. Mobilization is a person's ability to move freely and is a determining factor and marker of the post-surgical recovery process, mobilization being the most important aspect of essential physiological functions to maintain one's independence. Early mobilization can improve the return of intestinal function, reduce the risk of thrombosis and accelerate the duration of hospitalization (Cahyaningtyas, 2020). Several studies have concluded that early mobilization protocols can reduce respiratory decompensation, venous thrombosis, urinary tract infections, and various types of sepsis. Based on research conducted (Rahmawati, 2018) it was reported that there are still many post sectio caesarea patients who within three days are indicated to have infections around the wound area due to lack of understanding of the benefits of mobilization. The purpose of this study was to analyze the effect of the secio operation method on the time of early mobilization start.

METHOD

This study is a type of intervention research with observational retrospective or observational design with backward monitoring for 3 years. The location used for this research is in BPM Hj. Nurjanah ST and BPM Nurkholilah ST. Keb Pematang Village, Pematang District, Serang Regency. This research was conducted in May 2023. The samples used in this study used a total sampling of 43 samples consisting of 18 pregnant women with a history of ERACS secio and 25 with a history of conventional or non-ERACS seio. The independent variable in this study is the secio caesarea method, namely ERACS and non ERACS while the dependent variable is the time needed for early mobilization in hours. Early mobilization is defined as the time it takes for post-SC patients to be able to move and perform activities for the first time characterized by the ability to: tilt left / right, sit parallel and walk / get out of bed. The analysis used is by linear regression test.

RESULT AND DISCUSSION

Table 1.
Characteristics of Respondents (n=43)

Characteristic	f	%
Age of Respondents		
< 20 Years	4	9.3
20 – 35 Years	31	72.1
> 35 Years	8	18.6
Education		
Elementary (Elementary-Junior High)	17	39.5
Top (SMA- PT)	26	60.5
Parity		
Primipara	25	58.1
Multiparous	18	41.9

Table 1 based on the table above, this study used respondents as many as 43 samples in terms of age, in this study the majority of pregnant women were mostly in productive age, namely 20-35 years old with 31 people or equivalent to 72.1%, primiparous parity was 25 respondents or 58.1% and had completed high school education (SMA) as many as 26 respondents (60.5).

Table 2.
Average Mobilization Time of Mrs. Nifas Post Secio Caesarea (n=43)

Secio Caesarea Method	Mean	N	Std. Deviation	Minimum	Maximum
Non ERACS	6.48	25	2.55	3 Hours	12 Hours
ERACS	4.28	18	1.84	1 Hour	8 Hours

Table 2 the difference between the mean time between the secio caesarea method, where in the conventional secio group (Non ERACS) the average time needed for mobilization was 6.5 hours while in the ERACS secio group the average mobilization time was 2 hours faster which was 4 hours.

Table 3.
Linear regression relationship of Secio Caesarea technique selection (ERACS and non ERACS) with early mobilization time (n=43)

with early mobilization time (n = 15)						Df	Sig (2-tailed)
Type	Linear Regression						
	<i>Standardized Coefficients</i>		<i>95 Confidence Interval</i>				
	B	t	Std Error	Lower	Upper		
Secio Caesarea Method	-2.20	-3.12	0.706	-3.63	-0.78	43	0.003

Table 3 the results of linear regression analysis obtained a p value of $0.003 < 0.05$ which means that there is a significant relationship and difference in mobility time between patients postoperative cesarean section ERACS and non-ERACS. In these results there is a relationship between the ERACS cesarean secio method and the acceleration of mobilization time in patients and is statistically significant.

Early ambulation is an effort made as quickly as possible in postoperative patients by guiding patients to be able to carry out activities after the surgical process starting from light exercises on the bed (breathing exercises, effective coughing exercises and moving the limbs) until the patient can get out of bed, walk to the bathroom (Nayarani, 2023). Early mobilization post secio caesaria is a movement, position or activity that the mother performs immediately after delivery. To prevent postoperative complications, the mother's cesarean section must be mobilized immediately according to the stage. Because after experiencing a cesarean section, a mother is advised not to be lazy to move after cesarean section surgery. The faster the move, the better, but early mobilization must still be done carefully (Rahmawati, 2018).

Mobilization is a person's ability to move freely and is a prominent factor in speeding up post-surgical recovery. Thus, early mobilization is an effort made to maintain independence as soon as possible by guiding mothers to maintain physiological functions (Rahmawati, 2018). Early mobilization is one of the important factors that are part of the ERACS method component, namely early and frequent mobilization. In the ERACS method itself, early mobilization has levels and achievement targets that can help the recovery process of postpartum mothers so that it also affects the length of maternal hospitalization. This relates to the components that make up the ERACS protocol, such as early postpartum oral intake which not only accelerates the recovery of bowel function but also helps in the functional recovery process to carry out early mobilization without increasing complications such as nausea, vomiting, or infection. Faster release of urinary catheters in ERACS method patients also allows patients to perform early mobilization. Several studies have shown an increase in the speed of mobilization in SC postpartum patients with the ERACS method, followed by a decrease in the incidence of complications and the value of the postoperative pain scale (Zakowski, 2021).

CONCLUSION

In these results there is a relationship between the ERACS cesarean secio method and the acceleration of mobilization time in patients and is statistically significant. The conventional secio group (Non ERACS) needed 6.5 hours for mobilization while in the ERACS secio group the average mobilization time was 2 hours faster which was 4 hours.

REFERENCES

- WHO, 2021. World health organization. [Online]
Available at: <https://www.who.int/news/item/16-06-2021-caesarean-section-rates-continue-to-rise-amid-growing-inequalities-in-access>
[Accessed April, 29 2023].
- Sidharti, L. & K. E., 2023. Efek Samping Sectio Caesarea Metode ERACS (Literature Review). Medical Profession Journal of Lampung,, 13(2), pp. 34-37.
- Viandika, N. & S. R. M., 2020. Pengaruh Continuity Of Care Terhadap Angka Kejadian Sectio Cessarea. Journal for Quality in Women's Health, 3(1), pp. 1-8.
- Munandar, I. & K. Y., 2018. Kepatuhan Perawat dalam Pelaksanaan Standar Operasional Prosedur (SOP) Perawatan Luka dengan Kejadian Infeksi Luka Operasi Post Sectio caesarea. Jurnal Ilmiah Keperawatan Indonesia, Volume 8.

- Cahyaningtyas, A. Y., 2020. Hubungan Mobilisasi Dini Dengan Penyembuhan Luka Jahitan Pada Ibu Nifas Post Operasi Sectio Caesarea. *Jurnal ILKES (Jurnal Ilmu Kesehatan)*, 11(1), pp. 164-172.
- Ogunkua, O. & D. E., 2021. Enhanced recovery after cesarean section. *Contemporary OB/GYN Journal*, 66(5).
- Liu, Z. Q. D. W. J. & Y. S. L., 2020. Enhanced recovery after cesarean delivery: a challenge for anesthesiologists. *Chinese medical journal*, 133(05), pp. 590-596.
- Warmiyati, W. & R. F., 2022. Pengaruh Sectio Caesarea Metode Eracs Terhadap Percepatan Mobilisasi pada Ibu Bersalin di RS Hermina Daan Mogot Tahun 2022. *Cerdika: Jurnal Ilmiah Indonesia*, 2(9), pp. 821-829.
- Rahmawati, D., 2018. Hubungan Mobilisasi Dini Dengan Penyembuhan Luka Postsection caesarea Di Rumah Sakit Umum Daerah H. Badaruddin TanjungTahun2017. *Jurnal Dinamika Kesehatan*, 9(1).
- Nayarani, H., 2023. Perbedaan Lama Rawat Inap Dan Mobilisasi Dini Antara Pasien Operasi Sectio Caesarea Metode Eracs Dan Pasien Operasi Sectio Caesarea Metode Non Eracs Di Rsia Puti Bungsu Lampung Tengah Tahun 2022. Universitas Lampung.
- Zakowski, P. K., 2021. Enhanced Recovery After Cesarean: Current and Emerging Trends. *Current Anesthesiology Reports*, Volume 11, pp. 136-44.

