

Effect of early mobilization on post SC pain (a literature review)

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ABSTRAK

Early mobilization is a way to make patients independent so that patients are able to carry out their own activities without the help of others. Pain management can be pharmacological, non-pharmacological. Nonpharmacological techniques used to reduce postoperative pain are early mobilization techniques. This study was to determine the effect of early mobilization on Post SC pain. The method used is a literature review using the Google Scholar and PubMed databases by identifying 20 articles on the same topic in the 2018-2022 range and filtering them so that their feasibility is assessed and 15 articles are appropriate. Literature search used the keywords SC surgery, early mobilization. The results obtained from this literature study have the effect of mobilization on Post SC Pain patients, namely the application of one of the non-pharmacological techniques that can be used to reduce postoperative pain is the early mobilization technique. Based on the process, there was a significant difference in the effect of the results of early mobilization on the pain scale in post SC mothers. Early mobilization in post sectio caesarea patients can improve blood circulation so that the wound tissue becomes better. The faster the post-SC mother moves, the faster wound will heal. The limitations encountered during compiling this literature review were the difficulties in finding literature or sources that matched the guidelines and adjusting the title of the literature review with the inclusion criteria. It is hoped that future work researchers can learn more about early mobility in post-sc patients from different journals.

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INTRODUCTION

Sectio caesarea surgery has increased. Data from WHO (World Health Organization) in 2019, the average standard for sectio caesarean operations was around 10-15%, in 2020 it increased by 22.5%, even WHO global survey data on maternal and perinatal healers showed 46.1% of all sectio caesarea births. (Hizkianta Sembiring, 2022) 3,509 cases of sectio caesarea. (Furdiyanti et al., 2019)

RISKESDAS data for 2019 shows the rate of cesarean section deliveries of 78,736 (17.6%) and based on a preliminary study on March 10, 2020 in the Obgyn room of DR Saiful Anwar Malang Hospital, it was found that there were 284 patients with post-operative section caesarea for the last six months, namely July 2020 to December 2020 and an average of 47 people per month with post-surgery section cesarean section and almost all post cesarean sections stated the pain level scale above. (Anemia et al., 2023) Pain is an individual sensory reaction and the feeling of discomfort that is expressed according to each individual. (Dini & Caesarea, 2018) Based on time, there are two types of pain, namely acute pain and chronic pain. (Madiyanti et al., 2018) Pain after surgery creates a sense of stressor in which the patient will respond biologically and psychologically. (Indriyanti et al., 2022)

According to RISKESDAS in 2020, the number of deliveries by SC method in women aged 10-54 years in Indonesia reached 17.6% of the total number of deliveries. (Saleh, 2020) There are also several birth defects/complications in women aged 10-54 years in Indonesia reaching 23.2% with details of the transverse/ breech fetal position of 3.1%, bleeding of 2.4%, seizures of 0.2%, rupture of membranes Early delivery was 5.6%, prolonged labor was 4.3%, cord coil was 2.9%, placenta previa was 0.7%, placenta was left behind was 0.8%, hypertension was 2.7%, and others. others by 4.6%. (Heryani & Denny, 2017) Delivery through sectio caesaria surgery has increased in several countries including Indonesia by 6%. (Santoso et al., 2022) In Indonesia, cases of cesarean section surgery ranked the highest with a total of 480,622 cases. (Sihotang & Yulianti, 2018) Early mobilization is one way to gradually become independent of the patient so that the patient is able to carry out his own activities without the help of others. (Irmayanti, 2019)

Postoperative sectio caesarea patients are often faced with the problem of an acute inflammatory process and pain which results in limited movement. (Wahyudin & Perceka, 2021) As a result of postoperative pain, the patient becomes immobile or restricts movement. Immobilized conditions in postoperative patients can cause several adverse effects such as decreased blood supply, resulting in cell hypoxia and stimulating the secretion of pain chemical mediators so that the pain scale increases. Sectio caesarea surgery also has an impact, such as impairment, functional limitation, disability. (Mata & Kartini, 2020)

To prevent further complications after SC surgery, a nursing intervention is needed. According to (Indriyanti et al., 2022) pain management can be pharmacological, non-pharmacological or a combination of both. One of the non-pharmacological techniques that can be used to reduce postoperative pain is early mobilization techniques. (Rohmah, 2021) Non-pharmacological management of pain that can be carried out is family assistance, relaxation, breathing, nutritional diet, changing positions, massage, music, hydrotherapy, cold or heat therapy, hypobirthing, TENS or which stands for transcutaneous electrical nerve stimulation, pregnancy exercise, aromatherapy, and acupressure (Madiyanti et al., 2018).

Conditions of functional limitation result in patients being unable to sit, stand and walk and have disabilities due to pain and medical procedures. Approximately 60% of patients have very severe pain, 25% moderate pain and 15% mild pain (Heryani & Denny, 2017). Early mobilization is an effort to gradually make the patient independent, considering the magnitude of the responsibility that must be carried out by the mother for her recovery and caring for her baby, however, many mothers are afraid to move because they are afraid of feeling pain even though movement can reduce pain. (Simanjuntak & Panjaitan, 2021) In addition, early mobilization can train the mother's independence. Early mobilization is a prominent factor in accelerating post-surgical recovery and can prevent post-surgical complications, with early mobilization it is hoped that postpartum women can become healthier and stronger, besides that it can also expel lochia, help the process of wound healing due to childbirth, accelerate involution uteri, expedite the function of the gastro-intestinal and urinary organs and improve the smooth circulation of blood, thereby accelerating the release of breast milk (ASI) and the removal of residual (Sihotang & Yulianti, 2018). Wound healing is very important to carry out good management so that recovery of skin tissue and infection in wounds can be prevented and the healing process is more effective. The clinical condition of the mother is the basis that must be studied to handle or determine an effective wound management process (Irmayanti, 2019).

Entitled the relationship between age, nutrition and body mass index on post SC wound healing in postpartum women obtained the results of a statistical test of BMI with post SC wound healing with a p value of more than 0.005, which means there is no relationship between BMI and healing wound (Mata & Kartini, 2020). Management of non-pharmacological early mobilization is easier to control. (Hartati, 2019) Early mobilization is a stage of activity that is carried out immediately in postoperative patients starting from turning right and left, getting up and sitting on the edge of the bed then the patient can get out of bed, stand up and start learning to walk with assistance, according to the patient's condition. Researchers assume that implementing early mobilization in postoperative SC patients is effective (Handayani et al., n.d.)

Early mobilization is important to accelerate the mother's recovery so that she can return to her normal activities. this delay in mobilization will make the mother's condition worse so that healing will be delayed. Based on this, researchers consider it important to continue to carry out studies on early mobilization in postoperative mothers with sectio caesarea.

RESEARCH METHODS

The method used in this study is a literature review and uses the Google Scholar and PubMed databases by identifying 20 articles with the same topics and themes in the 2018-2023 range and filtering them so that they are assessed for feasibility and 15 articles that are suitable for inclusion are obtained. Screening of journal articles uses the PRISMA method (*Preferred Reporting Items for systematic Reviews and Meta Analysis*) to obtain the desired journal. Literature search used the keywords sectio caesarea surgery, early mobilization. Literature search used the keyword sectio caesarea surgery, early mobilization.

RESULTS AND DISCUSSION

This literature review was compiled through a review of selected articles and references for research purposes. The keywords used are: sectio caesarea surgery early mobilization. The author searches for the article using two databases, namely Google Scholar and PubMed. Based on the search, 20 articles related to Post SC were found. Then a similarity selection was carried out to get 20 articles, then a title and abstract filter was carried out to get 15 articles that were relevant to the title. Furthermore, a feasibility assessment was carried out, so that 15 journals were obtained that were in accordance with the relationship of early mobilization to Post SC. The literature obtained was selected using the narrative method by grouping the extracted data similar to the results measured to answer the research.

The results of research articles that match the Post SC criteria with early mobilization are combined in a table which includes the name and year of research, journal name, research title, research variables, research design, research variables, research design, research samples, research methods, research methods statistics, statistical analysis results, research results and research conclusions and suggestions made in the following table:

Table 1. The results of research articles that match the Post SC criteria with early mobilization

No	Name and year of research	Title jurnal	Types research	Variable and population	Method statistics	Conclusion
1	Agus Imam Santoso, Achmad Dafir, Firdaus, Risna Yakti Mumpuni 2022	Reducing Pain Scale in Postoperative Sectio Caesarea Patients with Early Mobilization Techniques	Qualitative	Dependent variable: pain scale Independent variable: Early mobilization techniques	<i>Quasy Experiment with Pre-Post test Only Control Group Design</i>	Delayed mobilization reduces blood supply, causes cells to lack oxygen, stimulates the secretion of pain chemical mediators so that the pain scale increases.

2	Tika Mei Handayani, Lis Sriningsi, Wagiyo 2012	The Need for Early Mobilization for Post Partum Section Caesarea at Tugurejo Hospital, Semarang	Descriptive qualitative	clients who experience Post Sc operations	Case studies using interviews, physical examinations, observation sheets and also documentation studies	Early mobilization should be done 4-5 hours postoperatively. Factors that can influence the success of the early mobilization process include age-related developmental factors, experience factors, and emotional factors.
3	Yunida Turisna, Simajuntak, Masriati Panjaitan 2020	Implementation of Early Mobilization for Post Sectio Caesarea Mothers at Sari Mutuara Hospital in Medan 2020	Descriptive	3 clients who underwent Post Sc surgery	The research instrument used the format of maternity nursing assessment, observation sheet, and SOP.	All clients are able to carry out early mobilization properly and according to the stages after being trained in early mobilization the three clients are able to carry out daily activities, it can be recommended for hospitals, especially nurses.
4	Desi metasari, Berlian Kando Sianipar 2018	The Effect of Early Mobilization on Post Sectio Caesarea Pain in Bengkulu Hospital	Qualitative	40 clients who underwent Post Sc surgery	<i>Quasy Experiment with Pre-Post test Only Control Group Design</i>	Early mobilization can reduce the pain intensity of post SC patients so it is suggested to the Hospital to carry out early mobilization for Post SC patients
5	Nikmatur Rohmah 2021	The Relationship between Early Mobilization and Reducing Pain Scale in SC Surgery Patients at Sawerigading Hospital, Palopo City in 2021	Quantitative	71 clients who underwent Post Sc surgery	Analytical Survey Study, with a Cross Sectional design	Early mobilization is one of the effective management in reducing the scale of postoperative pain. The majority of respondents in the room who had carried out early mobilization after Sectio caesarea surgery experienced a decrease in the pain scale in patients.
6	Mariati, sri surmiati, Eliana 2019	The effect of providing early mobilization health education on the length of days of treatment in	Quasi Eksperiment	Control group and intervention group	Consecutive sampling	There is an early mobilization relationship that affects the length of the day of treatment.

		postoperative patients sectio caesarea				
7	Hizkionta Sembiring 2021	The Effect of Early Mobilization on the Intensity of Post Sectio Caesarea Pain at Patar Asih Hospital, Beringin District, Deli Serdang Regency in 2021	Eksperimental	Independent variable: Early Mobilization. Dependent Variable: Pain Intensity	Metode Purposive Sampling	The Effect of Early Mobilization on Post Sectio Caesarea Pain.
8	Rita hartati, Ferinawati 2019	Relationship between Early Mobilization of Post Sectio Caesarea and Healing of Surgical Wounds at Autcenna General Hospital, Kota Juang District, Bireun Regency	Analitic	Variables: Early mobilization and wound healing	Accidental Sampling	Healing of Surgical Wounds with Slow Category Are patients who do not do early mobilization properly.
9	Tetet Kartilah Sofia Februari Peni cahyati Kusmiati Sofiatul Karmila 2022	An overview of the implementation of early mobilization in reducing pain scale in post-sectio caesarea mothers at Ciamis Hospital	Descriptive	Case study	Independent Variables: Parity and Experience. Dependent Variables: age, Education, Occupation	The inhibiting factor in decreasing the pain scale is the patient's low knowledge about the importance of pain management by carrying out early mobilization
10	Anis Satus, Mamik ratnawati, Amanda Dewi Kharisma 2018	The relationship between the level of surgical wound pain and early mobilization in post-sectio caesarean mothers in the Melati pavilion of Jombang Hospital	Correlation Analytics	Purposive Sampling	Independent Variable: Pain level Dependent Variable: Early Mobilization	To reduce Post Sectio Caesarea Pain, namely by providing analgesics and teaching relaxation techniques and carrying out early mobilization
11	Ni Ketut Citrawati, Ni Luh Gede Rika Rahayu, Niken Ayu Merna Eka Sari	The relationship of knowledge level to maternal attitude In Early Mobilization Post Sectio Cesarean	Korelasional	35 Respondent	Purposive Sampling	There is a relationship between the level of knowledge and the attitude of the mother in early mobilization after sectio cesarean in the Dara Room of Wangaya Hospital Denpasar.
12	Lusia Karolinda Lema, Rohana Mochsen,	Relationship KnowledgeLevel Early Mobilization With Behavior	Analitik korelasi	32 Respondent	Total Sampling	Theresult of analysis using the Chi Square statistical test was obtained p value =

	Maryati Barimbing	Early Mobilization of Postpartum Sectio Caesarea (SC) Mothers In the Sasando and Flamboyant Room RSUD Prof. Dr. W. Z Johannes Kupang				0.090 ($\alpha=0.05$) then $p > 0.05$ means there is no relationship between the level of early mobilization knowledge with postpartum SC early mobilization behavior in the Sasando and Flamboyant rooms of the Hospital. Prof. Dr. W. Z Johannes Kupang
13	Ribkha Itha Idhayanti, Asih Warastuti, Bekt Yuniyanti	Early Obilization Reduces Pain Due to Grade II Perineal Suture in Post Partum Mother	Survei Analitik	32 Respondent	Total Sampling	Thepoint is that there is relationship of pain level of grade II perineal wound sutures with early maternal mobilization 2 hours postpartum.
14	Etri Yanti, Harmawati Nova Fridalni	Earlyobilization in post sectio cesaria mothers	Lectures, demonstrations and redemonstration s	Pasien post sectio cesaria and a family of 17	Total Sampling	This activity results in increased knowledge and Patient behavior in early mobilization
15	Resdelita Murliana, Omega	Effectiveness of Early Mobilization for Wound Healing of Sectio Caesarea (SC) at DR. Drajat Prawiranegara Hospital (RSDP)	Quasi eksperimen	30 Respondents	Total Sampling	The statistical results show the probability value of Asymp. Sig. (2-tailed) < 0.05 , then H_0 was rejected. That the result of mobilization with SC wound healing has an Asymp probability value. Sig.(2-tailed) $0.001 < 0.05$ means that there is a significant difference in effectiveness between the group given mobilization and the group not given mobilization

Based on the results of Agus Imam Santoso *et.all*, where this research was conducted by providing early mobilization exercises 2 times a day from the first postoperative day, 5 repetitions per exercise. Exercises were performed during the first 2 postoperative days (20-30 minutes per session). The result was that patients who were given early mobilization (intervention group) postoperatively were significantly more physically active than patients who were not given early mobilization interventions (control group). The results of Tika Mei Handayani's research, the ability of patients to carry out mobilization is not the same between one patient to another patient. This is influenced by several factors such as age, status development, past experience or history prior reinforcement, lifestyle, level of education, and gifts information by health workers about the

disease process. The third journal shows that all clients are able to carry out early mobilization properly and according to the stages. The implementation of early mobilization consists of the following stages: sleep lie down for 8 hours first, then you can tilt, sit, stand and take a walk. Before doing the mobilization first do the breath deep and simple leg exercises. Stages of mobilization can help the body adapt well so that it doesn't cause other complaints not expected.

Desi metasari, *et.all* and Nikmatur Rohmah, there was a decrease in pain intensity after early mobilization was carried out gradually on average decreasing by 5 scales. This decrease in pain intensity occurs because mobilization will reduce the patient's concentration on the location of pain and can minimize the transmission of pain nerves to the nerve center. Mobilization will improve blood circulation including circulation to the wound area post sectio caesarea so as to reduce the activation of chemical mediators in the inflammatory process, so that pain intensity is reduced.

Hizkionta Sembiring and Rita Hartati obtained the results of a study on the length of care after sectio caesarea requiring normal treatment time of three to five days and the process. Clean postoperative suture removal is five to seven days appropriate with wound healing that occurs due to several complications can occur after surgery if not handled properly, so it takes a long time patient care days become long which can eventually have an impact the cost of care increases both for the patient and for the party hospital. If the deep breathing relaxation technique is done correctly will cause a decrease in pain that is felt to be greatly reduced / optimal and the patient already feels comfortable compared to before, otherwise if deep breathing relaxation technique is done incorrectly, then the pain is felt a little reduced but still felt pain and the patient did not feel comfortable with the situation, this is based on research findings conducted by Tetet Kartilah and Anis Artus.

The implementation of early mobilization is influenced by good knowledge and understanding of how it is implemented. (Ningsih & Rahmadhani, 2022) This was obtained from various sources such as explanations from officers and the support of families and officers as well as from previous experience. (Chengwu et al., 2021) Early mobilization that is carried out quickly, precisely and with good supervision can increase joint mobility and improve metabolism and better blood circulation, with earlier mobilization carried out 4-5 hours postoperatively, those who before intervention 1 experience moderate pain scale and after being treated do mobilization until intervention 2 then there is a decrease with a mild pain scale. (Herman et al., 2020) Optimal post-surgical pain management is not only an effort to reduce patient suffering, but also to improve the quality of life. It has been proven that without adequate post-surgical pain management, patients will experience physiological and psychological disorders which in turn significantly increase morbidity and mortality. (Kusumaningrum & Kartikasari, 2020) Early mobilization immediately after surgery which was carried out in stages and in a structured manner proved to be more influential in reducing postoperative pain than the group that delayed its mobilization. Movement exercises that are started when the patient does not feel full pain due to residual effects of anesthesia can give a feeling of more comfort and confidence. (Ulandari et al., 2022) Delayed mobilization gives a lot of harm to the patient. Static positions such as sleeping positions for a long time will result in a decrease in vascularity. (Furdiyanti et al., 2019)

According to the research of Ni Ketut Citrawati, et. al. The attitude of mothers in early mobilization after SC in the Dara Room of Wangaya Hospital Denpasar generally has a good attitude due to the good level of knowledge of respondents, and the information obtained. The higher the level of knowledge of post-sectio cesarean mothers about early mobilization, the more skilled the mother is in early mobilization, good maternal knowledge because she has extensive knowledge so that it is also good for the mother's attitude in early mobilization to be able to improve her health and all respondents in the Dara Room of Wangaya Hospital Denpasar get information related to early mobilization from midwives.(Citrawati et al., 2021)

According to the research of Lucy Karolinda Lema, et. al. There is a congruence between theory and fact. This is in accordance with the reality in the Sasando and Flamboyant room of RSUD Prof. Dr. W. Z Johannes Kupang in terms of the respondent's education level, many postpartum SC mothers who have an elementary education level of 11 people (34%). However, most respondents have a sufficient level of knowledge because not always a person's knowledge is obtained from formal education alone but knowledge

can also be obtained from one's living environment, and from health workers in participating in activities such as health counseling. (Lema et al., 2019)

The findings in the journals Ribkha Itha Idhayanti and Etri Yanti based on the results of the activity found an increase in audience knowledge about postoperative mobilization seccio cesaria, the audience was able to re-perform the movements that had been taught. (Simanjuntak & Panjaitan, 2021) It is expected that health workers will increase counseling to patients undergoing cesaria surgery about this mobilization, put up posters in patient rooms to make it easier for patients and families to access it, and always remind patients and families about the importance and impact of not doing so. (Itha Idhayanti et al., 2020) Resdelita Murliana found that mobilization is one of the factors that affect wound healing, because by mobilizing as early as possible it can improve blood circulation, with smooth blood circulation so as to meet the nutrients and oxygenation needed in the wound healing process through blood circulation. (Rahayu & Yunarsih, 2019)

CONCLUSION

Based on the series of research processes conducted, it can be concluded that there is a significant difference in the effect of the results of early mobilization on the scale of pain in post-SC mothers. There is a decrease in pain intensity after gradual early mobilization. (Taufik djafar et al., 2022) In addition, by doing early mobilization, post sectio caesarea patients can facilitate blood circulation which can help in repairing wound tissue for the better. (Susanti & Sari, 2022) The faster the post-SC mother moves, the faster the wound heals. The average score of pain among post-cesarean section patients before early onset mobilization is 9.19 which is categorized as heavy pain, the average post-cesarean pain score The share of patients after early mobilization was 3.68 yang categorized as moderate pain. (Roheman et al., 2020) There is differences in the mean post-cesarean pain scores Share of patients before and after early mobilization in other words early mobilization has a significant effect on reducing pain intensity between post-cesarean section patients. Initial mobilization is shown to have an effect on reducing pain intensity among post-cesarean section patients. Nurse must perform early mobilization as an effort to reduce pain among post-cesarean section patients non-pharmacologically. (Saleh, 2020)

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References

- Anemia, H., Dan, I. M. T., Dini, M., Luka, P., Caesarea, S., & R sud, D. I. (2023). *Hubungan anemia, imt dan mobilisasi dini dengan penyembuhan luka sectio caesarea di rsud kayuagung*. 7(April).
- Chengwu, Z., Florenly, Johannes Bastira Ginting, & Fioni. (2021). Influence before and after Early Mobilization of Changes in Pain Levels in Post Orthopedic Surgery Patients at Royal Prima Medan Hospital in 2021. *Britain International of Exact Sciences (BioEx) Journal*, 4(1), 24–30. <https://doi.org/10.33258/bioex.v4i1.541>
- Citrawati, N. K., Rahayu, N. L. G. R., & Sari, N. A. M. E. (2021). Hubungan Tingkat Pengetahuan dengan Sikap Ibu Dalam Mobilisasi Dini Pasca Sectio Caesarean. *Health Care: Jurnal Kesehatan*, 10(1), 1–7. <https://doi.org/10.36763/healthcare.v10i1.108>
- Dini, M., & Caesarea, S. (2018). *JOMBANG The Correlation Of Surgical Pain Level With Early Mobilization For Post Sectio Caesarea Mother In The Ward Of Melati Rsud Jombang Anis Satus S*. 66–73.
- Furdiyanti, N. H., Oktianti, D. O., Rahmadi, R. R., & Coreira, L. C. (2019). Keefektifan Ketoprofen Dan Ketorolak Sebagai Analgesik Pada Pasien Pasca Bedah Cesar. *Indonesian Journal of Pharmacy and Natural Product*, 2(1). <https://doi.org/10.35473/ijpnp.v2i1.194>
- Handayani, T. M., Sriningsih, I., Keperawatan, J., Semarang, P. K., Mobilisasi, K., & Dini, M. (n.d.). *Kebutuhan mobilisasi dini post partum sectio caesarea di rsud tugurejo semarang*.
- Hartati, R. (2019). HUBUNGAN MOBILISASI DINI POST SECTIO CAESAREA DENGAN PENYEMBUHAN LUKA OPERASI DI RSU AVICENNA KECAMATAN KOTA JUANG KABUPATEN BIREUEN The Relationship Of Early Post Sectio Caesarea Mobilization With Surgical Wound Healing In The Nursing Room Of Avicenna Ho. *Journal of Healthcare Technology and Medicine*, 5(2), 2615–109.
- Herman, A., Santoso, B., & Yunitasari, E. (2020). The Effect of Early Mobilization on Intestinal Peristaltics in Patients after a Cesarean Section in Kendari City Hospital. *Jurnal Ners*, 14(3), 288–291. <https://doi.org/10.20473/jn.v14i3.17148>

- Heryani, R., & Denny, A. (2017). Pengaruh Mobilisasi Dini Terhadap Penyembuhan Luka Post Sectio Caesarea. *Jurnal Ipteks Terapan*, 11(1), 109. <https://doi.org/10.22216/jit.2017.v11i1.661>
- Hizkianta Sembiring. (2022). Pengaruh Mobilisasi Dini Terhadap Intensitas Nyeri Post Sectio Caesarea (SC) Di Rumah Sakit Patar Asih Kecamatan Beringin Kabupaten Deli Serdang Tahun 2021. *Biologi Education & Technology*, 5(2), 25–30.
- Indriyanti, Sariaty, S., & Ferina. (2022). Pengaruh Teknik Relaksasi Genggam Jari Terhadap Penurunan Intensitas Nyeri Pada Ibu Post Sectio Caesarea: Evidence Based Case Report. *Jurnal Kesehatan Siliwangi*, 2(3), 751–761. <https://doi.org/10.34011/jks.v2i3.785>
- Irmayanti, I. (2019). Mobilisasi Dini Dalam Proses Penyembuhan Luka Sectio Caesarea Pada Ibu Post Partum Di Rs Dewi Sartika. *Jurnal SMART Kebidanan*, 6(1), 16. <https://doi.org/10.34310/sjkb.v6i1.237>
- Itha Idhayanti, R., Warastuti, A., & Yuniyanti, B. (2020). Mobilisasi Dini Menurunkan Nyeri Akibat Jahitan Perineum Tingkat Ii Pada Ibu Post Partum. *Jurnal Jendela Inovasi Daerah*, 3(2), 29–43. <https://doi.org/10.56354/jendelainovasi.v3i2.85>
- Kusumaningrum, A. T., & Kartikasari, R. I. (2020). Improvement Of Self Efficacy On Early Mobilization Capabilities In Post Sectio Caesaria. *Jurnal Midpro*, 12(1), 88. <https://doi.org/10.30736/md.v12i1.186>
- Lema, L. K., Mochsen, R., & Barimbing, M. (2019). Hubungan Tingkat Pengetahuan Mobilisasi dengan Perilaku Mobilisasi Dini Ibu Post Partum Sectio Casarea. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Madiyanti, Anggraeni, & Melinda. (2018). Hubungan Asupan Protein Dengan Penyembuhan Luka Pada Pasien Post Op Sectio Caesarea (SC) di Rumah Sakit Umum Daerah Pringsewu Lampung Tahun 2016. *Jurnal Asuhan Ibu & Anak*, 3(6), 1–9. <http://journal.stikes-aisyiyahbandung.ac.id/index.php/jaia/article/view/71>
- Mata, Y. P. R., & Kartini, M. (2020). Efektivitas Massage untuk Menurunkan Nyeri pada Pasien Post Operasi Sectio Caesarea (The Effectiveness of Massage in Pain Reduction of Post Caesarean Section Patients). *Jurnal Kesehatan*, 9(2), 58–72.
- Ningsih, N. J. setia, & Rahmadhani, W. (2022). the Role of Early Mobilization on Wound Healing After Sectio Caesarea. *Journal of Sexual and Reproductive Health Sciences*, 1(1), 7. <https://doi.org/10.26753/jsrhs.v1i1.698>
- Rahayu, D., & Yunarsih, Y. (2019). Mobilisasi Dini Pada Ibu Post Op Sectio Caesarea. *Jurnal Keperawatan*, 11(2), 111–118. <https://doi.org/10.32583/keperawatan.v11i2.432>
- Roheman, Seventina, H., Mustopa, Masrifah, & Wike. (2020). *Effect of Early Mobilization on the Decrease in Pain Intensity Among Post Cesarean Section Patients at Cirebon Hospital in 2019*. 27(ICoSHEET 2019), 382–384. <https://doi.org/10.2991/ahsr.k.200723.096>
- Rohmah, N. (2021). Hubungan Mobilisasi Dengan Penurunan Skala Nyeri Pada Pasien Post Operasi Sectio Caesarea Di RSUD Sawerigading Kota Palopo Tahun 2021. *Mega Buana Journal Of Nursing*, 1(September 2021), 7. <https://jurnal.stikes-megabuana.ac.id/index.php/MBJN>
- Saleh, S. N. H. (2020). Analisis Pemberian Mobilisasi Dini Post Sectio Caesarea Dengan Proses Penyembuhan Luka Operasi Di Ruang Nifas Rumah Sakit Umum Daerah Kota Kota Mobagu. *Jurnal IMJ: Indonesia Midwifery Journal*, 4(1), 1–5.
- Santoso, A. I., Firdaus, A. D., & Mumpuni, R. Y. (2022). Penurunan skala nyeri pasien post operasi sectio caesarea dengan teknik mobilisasi dini. *Jurnal Ilmiah Kesehatan Media Husada*, 11(April), 97–104.
- Sihotang, H. M., & Yulianti, H. (2018). Faktor-Faktor Yang Mempengaruhi Proses Penyembuhan Luka Post Sectio Caesarea. *Care : Jurnal Ilmiah Ilmu Kesehatan*, 6(2), 175. <https://doi.org/10.33366/cr.v6i2.926>
- Simanjuntak, Y. T. O., & Panjaitan, M. (2021). Penerapan Mobilisasi Dini Bagi Ibu Post Sectio Caesarea Di Rsu Sari Mutiara Medan 2020. *Jurnal Abdimas Mutiara*, 2(1), 183–187.
- Susanti, S., & Sari, I. N. (2022). Early Mobilization Behavior of Mother Post Section Caesarea At Embung Fatimah Hospital Batam City. *International Journal of Nursing and Midwifery Science (Ijnms)*, 6(1), 82–87. <https://doi.org/10.29082/ijnms/2022/vol6/iss1/382>
- Taufik djafar, N., Wowor, T. J., & Dwi, L. (2022). The Relationship of Early Mobilization and Wound Healing of Inflammation Phase among Post Cesarean Section Women at PMI Hospital Bogor West Java. *Nursing and Health Sciences Journal (NHSJ)*, 2(2), 99–103. <https://doi.org/10.53713/nhs.v2i2.42>
- Ulandari, S., Azizah, E. N., & Wulandari, R. F. (2022). Relationship Between Early Mobilization and The Wound Healing Process of Post Sectio Caesaria in The Maternity Room of RSUD Kabupaten Kediri. *Jurnal Ners Dan Kebidanan (Journal of Ners and Midwifery)*, 9(2), 154–161. <https://doi.org/10.26699/jnk.v9i2.art.p154-161>
- Wahyudin, & Perceka, A. L. (2021). *Jurnal medika cendikia. Tingkat Kepatuhan Protokol Kesehatan Masyarakat Dalam Menerapkan Aturan Kesehatan Semasa Pandemi Covid-19*, 08, 57–65.