

Indications for Sectio Caesarea Delivery: Literature Review

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Abstract

Background : SC (Sectio Caesarea) is one of the procedures in the birth process which is carried out to remove the baby from the stomach through an incision process made on the abdominal wall and uterus. The results of research conducted in Asian countries showed that around 110,000 SC procedures were carried out in several hospitals. The aim is to analyze the indications for Sectio Caesarea delivery. **Method:** The research method uses qualitative research with a literature review approach. **Results and Discussion:** The results obtained by Caesarean delivery are a technique for saving the mother and baby by making an incision in the mother's abdominal wall by removing the amniotic membranes, placenta and fetus from the uterus. **Conclusion:** The conclusion is that SC delivery has several indications including social, relative, fetal and absolute indications. Furthermore, caesarean section can also be caused by indications of several factors including fetal distress, anemia, asthma, eclampsia, maternal disease, polyhydramnios, oligohydramnios, cloudy amniotic fluid, premature rupture of membranes, amniotic fluid, failed induction, postdate, non-advanced labor, history of CS., and age at risk. After the mother goes through the Caesarean birth process, several complications will arise, including complications for the baby, bleeding, puerperal infection, and so on.

Keyword: indications; delivery; Sectio Caesarea

1. Introduction

SC (Sectio Caesarea) is one of the procedures in the birth process which is carried out to remove the baby from the stomach through an incision process made on the abdominal wall and uterus (Ilahiyah et al., 2023). According to facts in the field, it is clear that the normal birth process is difficult to carry out and can endanger the lives of both parties (mother and baby) (Munir, 2023), so to reduce the death rate, it can be done through Sectio Caesarea (Lufianti & Vinasajati, 2023). In ancient times, this surgical method was something that was frightening for pregnant women (Nababan, 2021). However, by keeping up with increasingly sophisticated developments, the impression of the Sectio Caesarea birth process is no longer scary, which is supported by technological developments in the medical field (Mardliyana & Puspita, 2022).

According to data presented by WHO itself, it shows that SC births have increased since 2007 and 2008 (Putra et al., 2021). The results of research conducted in Asian countries showed that around 110,000 SC procedures were carried out in several hospitals (Aprilia et al., 2024). In Indonesia itself, in 2018, a percentage of 17.6% of births were carried out using SC procedures (Anugrah et al., 2023). As is known, the SC delivery process is equipped with various kinds of sophisticated technology (Fatmawati & K, 2023), so that the hospital medical team will certainly maximize the safety of the lives of the mother and baby (Elektrina et al., 2023).

However, the risks that will be faced in the SC delivery process are certainly higher compared to normal delivery (Aurelia, 2023). One of the risks faced by babies during the SC delivery process is asphyxia or what is known as difficulty breathing (Sulfianti et al., 2020). Based on research conducted in Denmark on 34,000

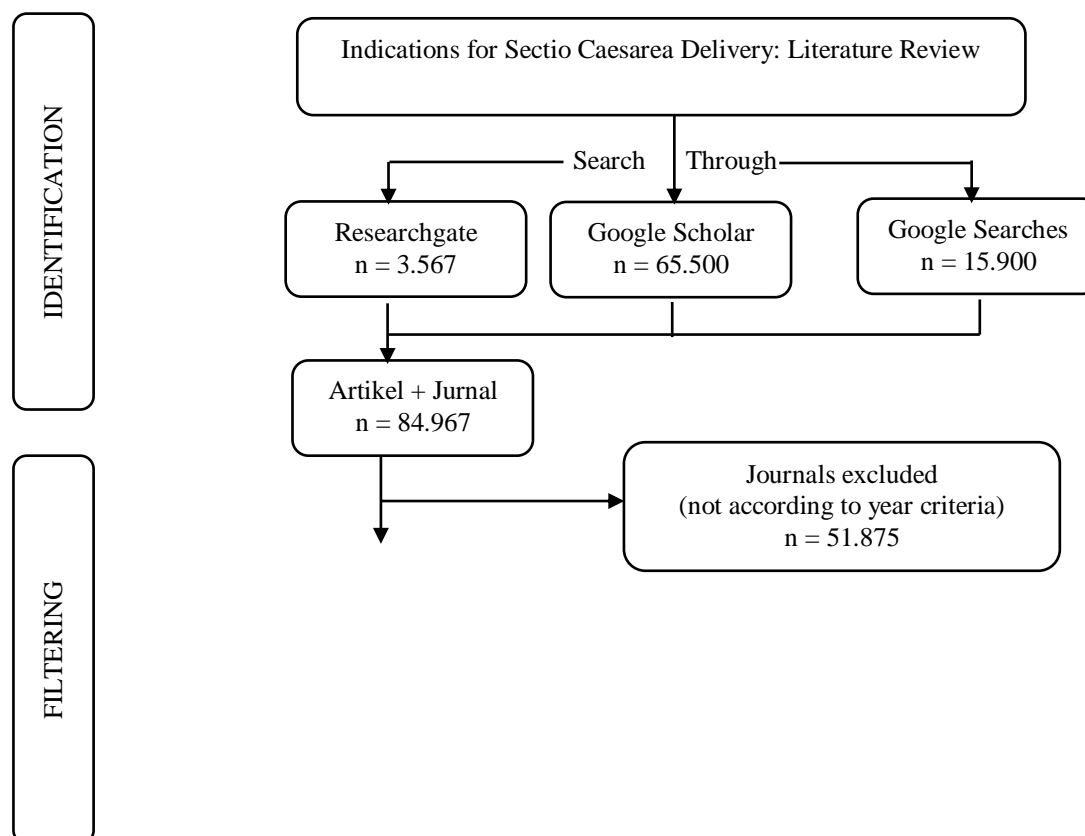
births, babies born via SC delivery at 37 weeks had a very high risk of breathing difficulties when compared to births at 38 and 39 weeks of gestation (Putra et al., 2021). Apart from that, the impacts of CS include more expensive delivery costs, long recovery time, uterine rupture, postpartum pain, and post-surgical infections (Febrianawati, 2024).

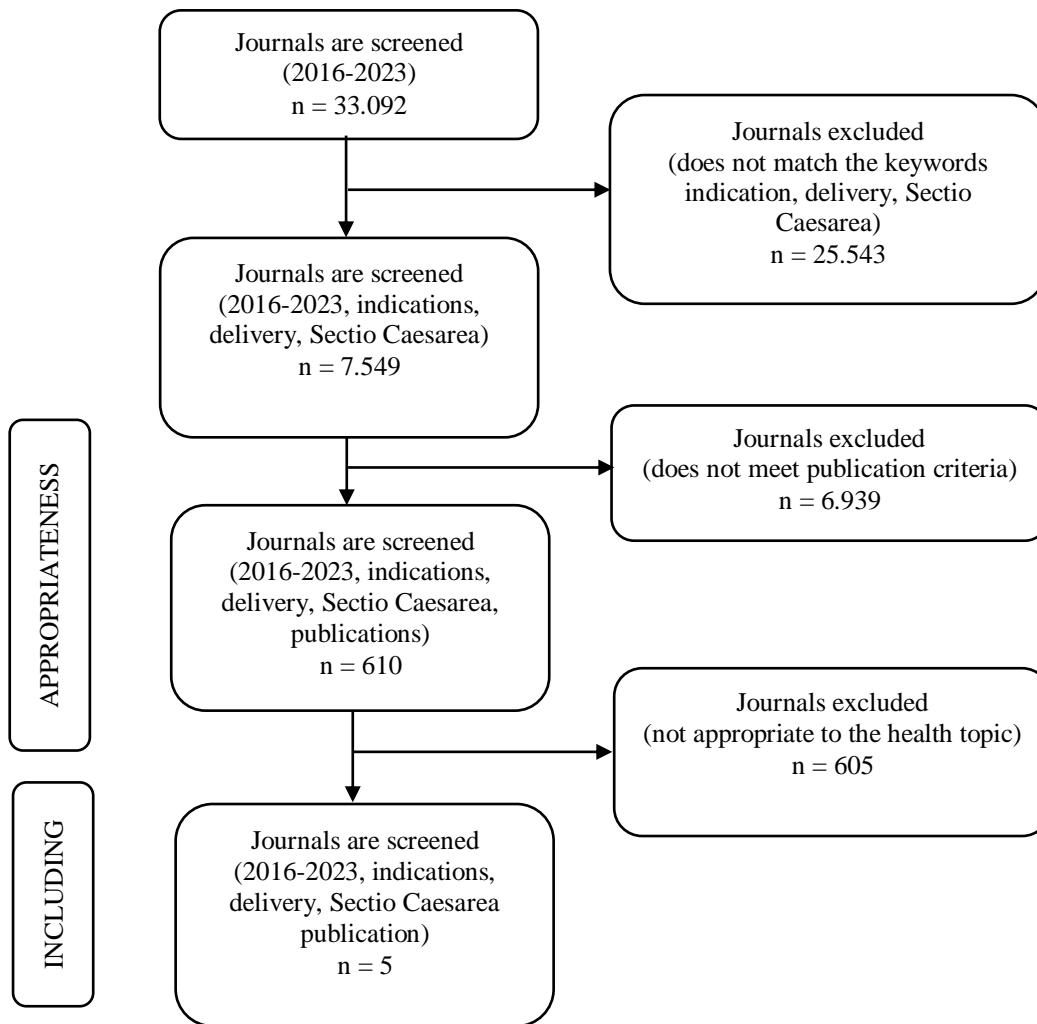
Previous research by Putra et al. (2021) explained that there are several indications of this birthing process, including a percentage of 4.8% indicating HIV infection in the mother, a percentage of 7.6% indicating latitude, a percentage of 2% indicating multiple pregnancies, a percentage of 10% due to buttocks factors, a percentage of 24% indicating nonreassuring fetal status factors, a percentage of 31.6% indicates recurrent SC delivery, a percentage of 6% indicates placenta previa, a percentage of 0.8% indicates placental abruption, and a percentage of 13.2% indicates pelvic disproportion. Most pregnant women prefer to have a normal delivery. Based on this, prevention and monitoring of the health of pregnant women can be carried out. Apart from that, it can also be done through education or sharing knowledge related to the health of pregnant women (Putra et al., 2021).

Based on the explanation above, the author took the title "Indications for Sectio Caesarea Delivery: Literature Review". The purpose of this writing is to analyze the indications for Sectio Caesarea delivery. The limitations used in writing this journal are only based on literature review studies or can be called literature studies taken from several journals, articles, books, theses, or several other relevant sources that are related to the title that has been formulated.

2. Research Metode

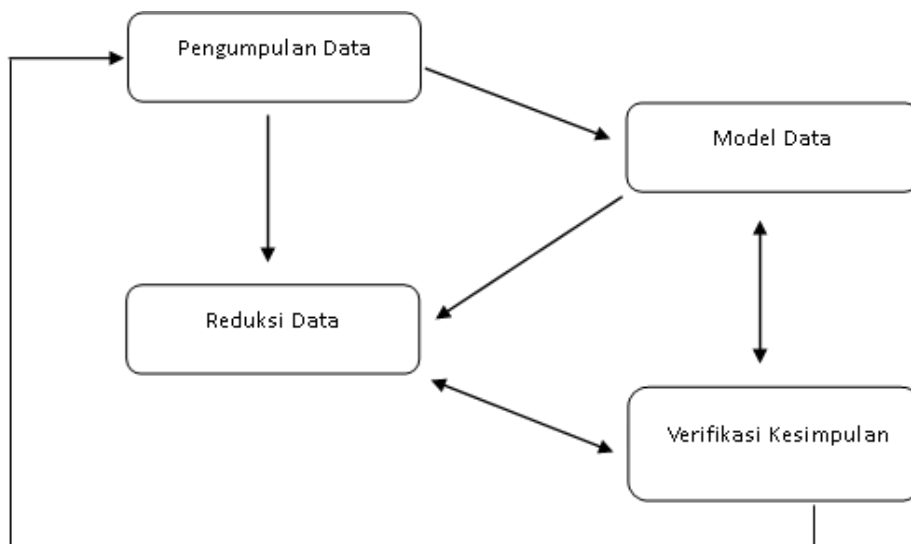
The research method uses qualitative research with a literature review approach (literature review). Qualitative research is a type of research that is connected to the use of words or sentences followed by detailed analysis activities based on the findings in the research (Sugiyono, 2018). Data collection techniques through literature studies were sourced from Google Scholar searches, Researchgate, and Google databases. The keywords used are "Indications for Sectio Caesarea Delivery". The following is a prism diagram that explains the data acquisition for further analysis, namely as follows: :





Gambar 2. Diagram Alir PRISMA

Next, after the data is obtained, we proceed to the data analysis stage. The following is Figure 2 which explains the results of the data analysis carried out.



Gambar 2. Teknik Analisis Data

Sumber: Miles & Huberman (1992) dalam (Diyati & Muhyadi, 2019)

3. Results and Discussion

The following is Table 1 which explains the research results obtained through literature review, namely as follows:

Tabel 1. Hasil Analisis

No.	Judul	Author	Tujuan	Hasil Analisis
1.	"Indikasi Persalinan Sectio Caesarea dan Komplikasi Pasca Persalinan Sectio Caesarea"	Safitri, 2020.	It aims to describe caesarean section delivery through indications and postpartum complications.	The birth process is experienced by a woman. Because, this is the nature of a woman. Normal childbirth experienced by a woman is carried out by giving birth from the vagina. However, when a normal delivery process is difficult, a birth procedure known as a caesarean section can be performed. Caesarean delivery is a technique to save the mother and baby by making an incision in the mother's abdominal wall by removing the amniotic membranes, placenta and fetus from the uterus. Of course, childbirth has several indications, including social, relative, fetal and absolute indications. Furthermore, caesarean section can also be caused by several factors including fetal distress, anemia, asthma, eclampsia, maternal disease, polyhydramnios, oligohydramnios, cloudy amniotic fluid, premature rupture of membranes, amniotic fluid, failed induction, postdate, non-progressing labor, history of CS, and age at risk. After the mother goes through the Caesarean birth process, several complications will arise, including complications for the baby, bleeding, puerperal infection, and so on.
2.	"Analisa indikasi dilakukan persalinan sectio caesarea di RSUP"	Yaeni, 2018.	Aims to provide an overview of the birth process carried out by caesarean	In the field of childbirth, there is a term known as sectio caesarea. This delivery process certainly requires greater costs compared to normal delivery. Non-medical indications for Caesarean delivery can be caused by several

	Dr. Soeradji Tirtonegoro Klaten”		section at Klaten Hospital.	things, including socio-economic, socio-cultural, education and age. According to literature sources, indications for caesarean birth include (a) social indications, the mother's decision to take the action of giving birth by caesarean, including experiencing fear of the baby being injured or this could be caused by previous birth experiences; (b) relative indications, in this indication the cause is stated, including the mother being HIV positive, severe preeclampsia, fetal distress dystocia, breech presentation, and a history of caesarean section; (c) absolute indication, caused by both the baby and the mother. In terms of infant factors, these include preventing fetal hypoxia, delayed development of the baby, placental prolapse, fetal distress, and brain abnormalities. Then, in terms of the mother, it could be caused by uterine rupture, cephalopelvic, placenta previa, cervical stenosis, birth canal tumors, lack of stimulation, and a narrow pelvis.
3.	“Indikasi Persalinan Sectio Caesarea Berdasarkan Umur Dan Paritas”	Pontoh, 2016.	It aims to analyze parity and age which are indirectly factors in the indication for caesarean section delivery.	The government itself made a regulation that stated that it was prohibited to carry out childbirth based on Caesarean action, if there were no strong indications. This is because a Caesarean birth has a higher impact compared to a normal birth. According to a literature study conducted, there are several impacts felt by mothers when deciding to have a caesarean section, including being able to produce a wound percentage of up to 11%, surgical wound infections, endometritis or uterine infections, injuries to the blood vessels, uterus and bladder. . When carrying out a Caesarean procedure, it is necessary to consider indications. The indication here can be interpreted as a determinant for a mother to carry out a Caesarean procedure based on several conditions that must be met first. Medical indications from a medical review include Caesarean when there are twins, umbilical cord abnormalities, placental factors, abnormalities, fetal distress, positional abnormalities, and the baby is too big. Meanwhile, maternal factors include pre-eclampsia, PROM, uterine contraction abnormalities, obstruction of the birth canal, stage conditions, parity, and age. For example, non-medical indications are High Social Value Baby (HSVB).
4.	“Gambaran Indikasi Persalinan Sectio Caesarea di RSUD Kota Kendari Tahun 2018”	Jumatrin, dkk., 2022.	It aims to describe the indications for caesarean section during the birth process.	Childbirth carried out by Sectio Caesarea is not carried out by just any pregnant woman. According to literature studies, this delivery process is carried out when the baby's weight is known to be more than 500 grams. When various kinds of problems are found during the normal birth process, the doctor may recommend a Sectio Caesarea procedure. There are several factors that cause indications for Caesarean delivery, including Power (strength), Passage (birth canal), Passanger (fetus), and several other indications. Increasingly sophisticated medical developments can mean that caesarean section deliveries can be carried out without medical indications. This means that if the patient wants to give birth by Caesarean method, then this can be done, so that there is an increase in Sectio Caesarea deliveries. In this case, it is necessary to pay attention to the potential that can arise as a result of childbirth carried out via Sectio Caesarea which is 5x higher and larger compared to normal childbirth.
5.	“Indikasi Tindakan Sectio Caesarea di RSUD Sanjiwani	Putra, dkk., 2021.	The aim is to analyze the percentage of	The phenomenon of childbirth via Sectio Caesarea can generally occur in several hospitals in Indonesia. According to the research results, there are several indications of this

Gianyar Tahun 2017-2019”			indications for delivery via Sectio Caesarea at hospitals in Gianyar.	birthing process, including a percentage of 4.8% indicating HIV infection in the mother, a percentage of 7.6% indicating latitude, a percentage of 2% indicating multiple pregnancies, a percentage of 10% due to factors buttocks, a percentage of 24% indicates non-reassuring fetal status, a percentage of 31.6% indicates recurrent SC delivery, a percentage of 6% indicates placenta previa, a percentage of 0.8% indicates placental abruption, and a percentage of 13.2 % indicates head pelvic disproportion factor. Most pregnant women prefer to have a normal delivery. Based on this, prevention and monitoring of the health of pregnant women can be carried out. Apart from that, it can also be done through education or sharing knowledge related to the health of pregnant women.
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The birth process is experienced by a woman. Because, this is the nature of a woman. Normal childbirth experienced by a woman is carried out by giving birth from the vagina. However, when a normal delivery process is difficult, a birth procedure known as a caesarean section can be performed. Caesarean delivery is a technique to save the mother and baby by making an incision in the mother's abdominal wall by removing the amniotic membranes, placenta and fetus from the uterus. Of course, childbirth has several indications, including social, relative, fetal and absolute indications. Furthermore, caesarean section can also be caused by indications of several factors including fetal distress, anemia, asthma, eclampsia, maternal disease, polyhydramnios, oligohydramnios, cloudy amniotic fluid, premature rupture of membranes, amniotic fluid, failed induction, postdate, non-advanced labor, history of CS. , and age at risk. After the mother goes through the Caesarean birth process, several complications will arise, including complications for the baby, bleeding, puerperal infection, and so on (Safitri, 2020).

In the field of childbirth, there is a term known as sectio caesarea. This delivery process certainly requires greater costs compared to normal delivery. Non-medical indications for Caesarean delivery can be caused by several things, including socio-economic, socio-cultural, education and age. According to literature sources, indications for caesarean delivery include:

(a) Social indications

The mother's decision to give birth by Caesarean method includes experiencing fear of the baby being injured or it could be caused by previous birth experiences;

(b) Relative indication

In this indication, the causes are stated, including the mother being HIV positive, severe preeclampsia, fetal distress dystocia, breech presentation, and a history of caesarean section.;

(c) Absolute indication

Absolute indications can be caused by both the baby and the mother. In terms of infant factors, these include preventing fetal hypoxia, delayed development of the baby, placental prolapse, fetal distress, and brain abnormalities. Then, from a maternal perspective, it can be caused by uterine rupture, cephalopelvic, placenta previa, cervical stenosis, birth canal tumors, lack of stimulation, and narrow pelvis (Yaeni, 2018).

The government itself made a regulation that stated that it was prohibited to carry out childbirth based on Caesarean action, if there were no strong indications. This is because a Caesarean birth has a higher impact compared to a normal birth. According to a literature study conducted, there are several impacts felt by mothers when deciding to have a caesarean section, including being able to produce a wound percentage of up to 11%, surgical wound infections, endometritis or uterine infections, injuries to the blood vessels, uterus and bladder. . When carrying out a Caesarean procedure, it is necessary to consider indications. The indication here can be interpreted as a determinant for a mother to carry out a Caesarean procedure based on several conditions that must be met first. Medical indications from a medical review include Caesarean when there are twins, umbilical cord abnormalities, placental factors, abnormalities, fetal distress, positional

abnormalities, and the baby is too big. Meanwhile, maternal factors include pre-eclampsia, PROM, uterine contraction abnormalities, obstruction of the birth canal, stage conditions, parity, and age. Non-medical indications, for example, are High Social Value Baby (HSVB) (Pontoh, 2016).

Childbirth carried out by Sectio Caesarea is not carried out by just any pregnant woman. According to literature studies, this delivery process is carried out when the baby's weight is known to be more than 500 grams. When various kinds of problems are found during the normal birth process, the doctor may recommend a Sectio Caesarea procedure. There are several factors that cause indications for Caesarean delivery, including Power (strength), Passage (birth canal), Passanger (fetus), and several other indications. Increasingly sophisticated medical developments can mean that caesarean section deliveries can be carried out without medical indications. This means that if the patient wants to give birth by Caesarean method, then this can be done, so that there is an increase in Sectio Caesarea deliveries. In this case, it is necessary to pay attention to the potential that can arise as a result of childbirth carried out via Sectio Caesarea which is 5x higher and larger compared to normal childbirth (Jumatin et al., 2022).

The phenomenon of childbirth via Sectio Caesarea can generally occur in several hospitals in Indonesia. According to the research results, there are several indications of this birthing process, including a percentage of 4.8% indicating HIV infection in the mother, a percentage of 7.6% indicating latitude, a percentage of 2% indicating multiple pregnancies, a percentage of 10% due to factors buttocks, a percentage of 24% indicates non-reassuring fetal status, a percentage of 31.6% indicates recurrent SC delivery, a percentage of 6% indicates placenta previa, a percentage of 0.8% indicates placental abruption, and a percentage of 13.2 % indicates head pelvic disproportion factor. Most pregnant women prefer to have a normal delivery. Based on this, prevention and monitoring of the health of pregnant women can be carried out. Apart from that, it can also be done through education or sharing knowledge related to the health of pregnant women (Putra et al., 2021).

4. Conclusion

The conclusion based on the explanation above is that Caesarean delivery is a technique for saving the mother and baby by making an incision in the mother's abdominal wall by removing the amniotic membranes, placenta and fetus from the uterus. Of course, childbirth has several indications, including social, relative, fetal and absolute indications. Furthermore, caesarean section can also be caused by indications of several factors including fetal distress, anemia, asthma, eclampsia, maternal disease, polyhydramnios, oligohydramnios, cloudy amniotic fluid, premature rupture of membranes, amniotic fluid, failed induction, postdate, non-advanced labor, history of CS. , and age at risk. After the mother goes through the Caesarean birth process, several complications will arise, including complications for the baby, bleeding, puerperal infection, and so on.

Suggestions are directed to the next author to continue this writing by adding some supporting data of a quantitative nature, so that the results of the research carried out can be valid, feasible and accountable. It is also recommended for readers to study in more depth the indications for the SC delivery process, so that the reader's knowledge can be broadened. Furthermore, it is recommended for pregnant women to understand the SC delivery process for the safety of mother and baby.

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