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**INCREASING CESAREAN SECTION RATE: A GLOBAL PROBLEM AND THE
SITUATION IN UZBEKISTAN**



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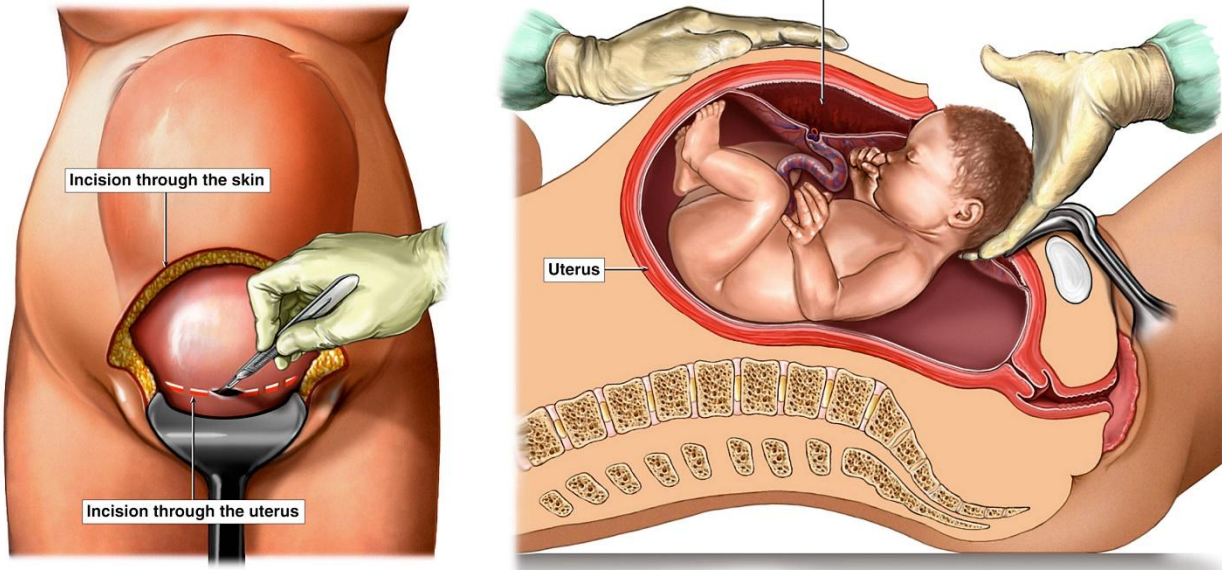
Аннотация: В последние десятилетия во всем мире наблюдается устойчивая тенденция роста частоты операций кесарева сечения. Согласно рекомендациям Всемирной организации здравоохранения, кесарево сечение должно проводиться исключительно по медицинским показаниям, однако на практике данный метод родоразрешения все чаще применяется без достаточных оснований. Чрезмерное использование кесарева сечения связано с повышенным риском краткосрочных и долгосрочных осложнений для матери и новорождённого. В данной статье анализируются глобальные причины роста частоты кесарева сечения, включая медицинские, социальные и организационные факторы. Отдельное внимание уделено современному состоянию данной проблемы в Узбекистан, а также путям оптимизации акушерской помощи и снижению необоснованных оперативных вмешательств.

Ключевые слова: кесарево сечение, родоразрешение, перинатальное здоровье, здоровье матери и ребёнка, оперативные роды, глобальная медицина, акушерство

Abstract: In recent decades, a significant global increase in the rate of cesarean section has been observed. Although the World Health Organization recommends performing cesarean delivery only when medically indicated, this surgical intervention is increasingly used as a primary mode of childbirth in many countries. Unjustified cesarean sections are associated with higher risks of short- and long-term complications for both mothers and newborns. This article examines the global trends and underlying medical, social, and organizational factors contributing to the rising cesarean section rates. Particular attention is given to the current situation in Uzbekistan, highlighting national practices, challenges, and strategies aimed at optimizing childbirth management and improving maternal and perinatal health outcomes.

Keywords: cesarean section, childbirth methods, maternal health, neonatal outcomes, operative delivery, global health, obstetrics

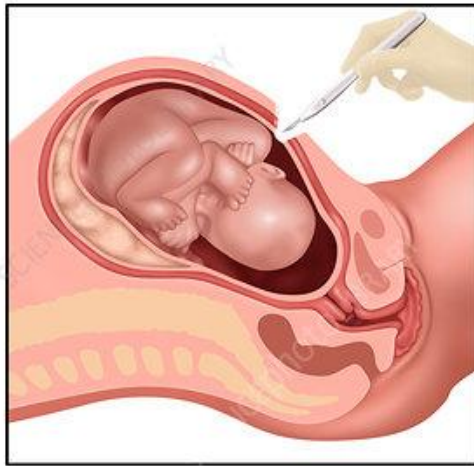
Incisions for caesarean section



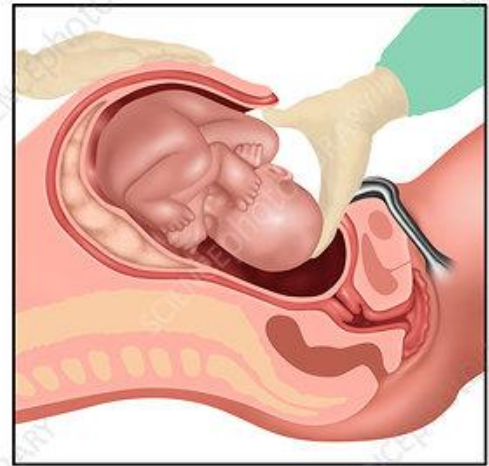
Introduction

The incidence of cesarean section (C-section) has increased significantly worldwide over the past few decades. According to the World Health Organization (WHO), the global average cesarean section rate in the 1980s was 6–7%, while today it is around 21–23%. In some developed countries, this figure has reached 30–40%. The increase in cesarean section is associated with a number of social, medical and organizational factors. At the same time, although operative delivery is used in many cases as an important medical tool for the health of the mother and child, its excessive and unreasonable use is recognized as a serious problem in the global health sector. A study of global trends shows that a number of reasons influence the increase in cesarean section. These include ensuring the safety of the mother and child, misinterpretation of medical indications, preferences of medical personnel and patients, as well as social and cultural factors. For example, in some countries, the practice of preferring operative delivery for the purpose of birth planning, personal convenience and saving time is widespread. At the same time, shortcomings in the medical system, limitations in monitoring the labor process, shortage of qualified personnel and limited resuscitation capabilities also contribute to the increase in cesarean section. In the case of Uzbekistan, the frequency of cesarean section has also increased significantly in recent years. According to national statistics, the rate of cesarean section is higher in urban areas than in rural areas, which is influenced by a combination of medical, social and cultural factors. This situation makes the issues of maternal and child health, effective allocation of medical resources and improvement of perinatal outcomes urgent. Therefore, the increase in the frequency of cesarean section should be considered not only as a medical, but also as a social and economic global and national problem. This article analyzes global trends in cesarean section, provides scientifically based data on the reasons for its increase, risk factors, and impact on maternal and child health. It also examines the current state of cesarean section practice in Uzbekistan, national medical strategies, and ways to optimize it. The results of the study are presented in the form of scientific conclusions aimed at preventing the unreasonable use of cesarean section, improving maternal and perinatal health, and developing the national healthcare system.

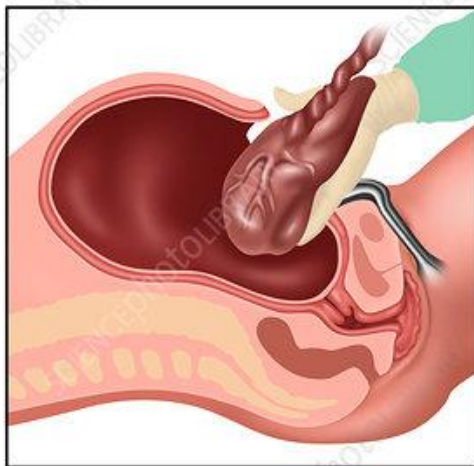
Cesarean Section



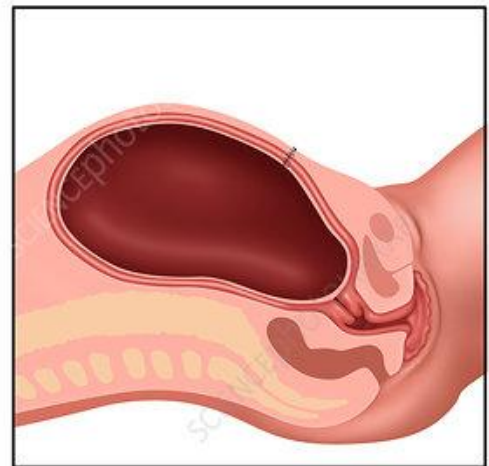
1. Incision made in abdomen and another one in the uterus.



2. The baby is removed



3. The placenta is removed



4. Incisions in the skin and uterus are closed with stitches

Literature review and methodology

The increase in the number of caesarean sections worldwide in recent decades has received widespread scientific attention. According to the World Health Organization, the increase in the rate of caesarean sections is considered a serious challenge for the global health system. The scientific literature shows that excessive and unnecessary caesarean sections have a negative impact on the health of both mothers and children. They increase the risk of short-term postoperative complications, neonatal respiratory failure, post-surgical infections, as well as long-term reproductive and psychological problems. At the same time, the literature analyzes global trends, differences between developed and developing countries, as well as social, cultural and medical factors. The sources analyzed indicate that a number of reasons influence the increase in the frequency of caesarean sections. Medical factors, in particular, ensuring the safety of the mother and child, complications



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during pregnancy and childbirth, chronic diseases and high-risk pregnancies, are noted as the main drivers of the use of caesarean sections. At the same time, social and cultural factors also play an important role. In some societies, the practice of choosing operative delivery for the purpose of birth planning, personal convenience and time saving is widespread. In addition, organizational constraints in the medical system, a shortage of qualified personnel, differences in the quality of service between urban and rural areas, financial incentives and logistical constraints lead to an increase in the rate of cesarean section. This situation is also relevant in the national context. In Uzbekistan, the rate of cesarean section has increased significantly in recent years. In urban areas, this indicator is higher than in rural areas, which is due to a combination of misinterpretation of medical indications, some limitations in the system of monitoring the health of mothers and children, as well as socio-cultural factors. Therefore, optimizing the rate of cesarean section and improving maternal and perinatal health is one of the urgent issues for the national healthcare system. As a research methodology, literature review and national statistical data were used as the main tools. In this, global and national data were systematically collected, classified and analyzed. During the study, information was compiled on the causes of cesarean section, its impact on maternal and child health, and socio-cultural and organizational factors. On this basis, global trends and the situation in Uzbekistan were compared, and differences and similarities were identified. This methodology serves to ensure the scientific validity of the study and the reliability of the results. Combined with the literature review and methodology, the article allows for a deep and systematic study of the reasons for the increase in the frequency of cesarean sections and the factors affecting it. This study also creates a scientific basis for developing practical recommendations aimed at optimizing cesarean section and improving maternal and child health in the national context.

Results

The study results showed that the increase in the frequency of caesarean sections worldwide is a complex and multifaceted problem. Based on the study of global trends, it was found that in many countries, caesarean sections are not limited to medical indications alone, but are often performed under the influence of social, cultural and personal factors. In addition, excessive caesarean sections increase the health of both mothers and children to various degrees, including postoperative infections, neonatal respiratory failure, postpartum psychological stress and future reproductive problems. The results of the analysis indicate that organizational constraints in the health system and a shortage of qualified personnel play an important role in the increase in the rate of caesarean sections. The frequency of caesarean sections in urban areas is significantly higher than in rural areas, which is associated with differences in the system of monitoring maternal and child health and socio-cultural factors. In the national context, that is, in the conditions of Uzbekistan, the results of the study indicate that the main reasons for the increase in the frequency of caesarean sections are related to the following. First, there are cases of misinterpretation of medical indications and sometimes the use of operative delivery as conditional safety measures. Second, personal conveniences of the mother and family, birth planning habits in urban areas, and the need to save time encourage the use of caesarean sections. Third, organizational aspects of the medical system, including the limited number of qualified specialists, logistics, and resources, also contribute to the excessive use of operative delivery. When comparing global literature and national data, it is revealed that not only medical, but also social and cultural factors significantly affect the increase in the frequency of caesarean sections. At the same time, it is observed that national strategies and measures to improve maternal and perinatal health are still not fully implemented. The results of the study confirm that the increase in the frequency of caesarean sections in the global and national context is a complex and multifactorial process. The results indicate the need to optimize cesarean section rates by protecting maternal and child health, strictly adhering to medical guidelines, and effectively allocating resources within the national healthcare system.

EXPLORING CAESAREAN BIRTH

ALL BIRTHS ARE VALID

Ask your birth provider 3 questions to facilitate shared decision-making:

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

20%

1 in 5 babies are born by caesarean section

80%

8 out of 10 babies are born vaginally

RISKS

Common complications for you include:

- Pain. One in 10 women will experience discomfort for the first few months.
- Infection is common (2-7 in 100 women)
- Developing scar tissue (adhesions) internally when you heal from the operation.
- Mild to moderate bleeding under 500ml

Common risks to your baby include:

- Skin grazes, or cuts in 1-2 in 100 babies
- Short-lived breathing problems affect 4-5 in 100 babies

Serious complications include:

- Heavy bleeding which means you may need a blood transfusion
- Blood clots in your legs/ lungs (deep vein thrombosis/ pulmonary embolism).
- Hysterectomy (removal of your uterus) due to heavy bleeding (about 1 in 670 women after caesarean birth compared with 1 in 1250 after vaginal birth).
- Death - 1 in 4200 women after caesarean birth compared with 1 in 25 000 women after vaginal birth.
- Rare chance of injury to the bladder or other abdominal organs.

FUTURE PREGNANCY RISKS

- placenta accreta in any future pregnancy (1 in 1000 women compared with 1 in 2500 women who have had vaginal births). Placenta accreta is where the placenta does not come away as it should when your baby is born. You may lose a lot of blood, need a blood transfusion, and are likely to need a hysterectomy.
- having a uterine rupture (1 in 98 women after a previous caesarean compared with 1 in 2500 with no previous caesarean, if you have a vaginal birth)

There is a very small increased chance of babies born by caesarean:

- Developing asthma later on in life (1 in 55 compared with 1 in 67 after a vaginal birth).
- Becoming obese as a child (1 in 22 compared to 1 in 25 after a vaginal birth).
- Dying in the first 28 days of birth (1 in 2000 compared to around 1 in 3300 after vaginal birth).
- Some studies indicate that caesarean birth is associated with autism spectrum disorder and attention deficit/hyperactivity disorder. The evidence base on this is still preliminary.

BENEFITS

The benefits of having a caesarean birth include:

- Minimising the chance of needing an assisted vaginal birth or an emergency caesarean birth.
 - The chance of you needing an assisted vaginal birth if you are a first time mum is between 1 in 2 and 1 in 3 in the UK (1 in 8 including women who have given birth before).
 - The chance of you needing an emergency caesarean birth is 1 in 3 if you are a first time mum in the UK (1 in 5 including women who have given birth before).
- Avoiding the chance of tears to your vagina or perineum. Perineal tearing is very common during a vaginal birth. The chance of long term complications following a tear is small. Further information, including how to reduce your chance of tearing, can be found on the RCOG hub for Perineal tears and episiotomies in childbirth and patient information poster Perineal tears during childbirth.
- Reducing the chance of you having urinary incontinence (leaking urine). Up to 1 in 4 (28%) women who have a baby born by caesarean experience urinary incontinence compared to up to 1 in 2 (49%) women who give birth vaginally. The chance of longer term urinary incontinence is lower whichever way you give birth and pelvic floor exercises can help.
- Having a planned date for the birth and reducing the uncertainties of going into labour naturally.

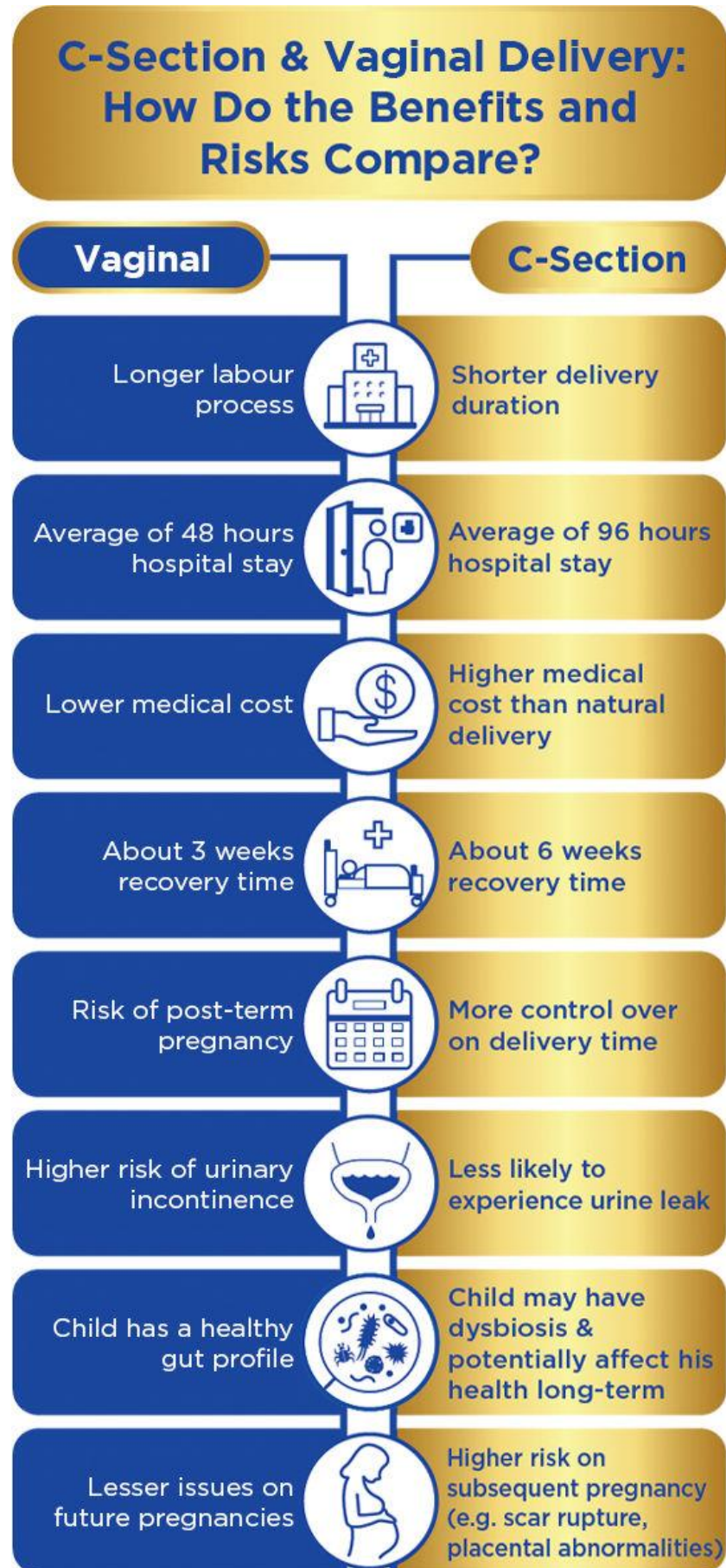
Further information available from the RCOG Patient Information Leaflets



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Discussion

The results of this study indicate that the increase in the frequency of cesarean sections is not a random process, but the result of a combination of many factors. When compared with scientific studies conducted on a global scale, the results of this study confirm that in many cases cesarean sections are performed under the influence of factors other than medical necessity. This situation requires a review of approaches to labor management in modern obstetric practice. As it was found out during the discussion, cesarean section is chosen in many cases as a means of ensuring the safety of the mother and child. However, as noted in the literature, resorting to operative delivery, even in cases where there is a possibility of physiological labor, can lead to long-term negative consequences. In particular, the slowdown in the postpartum recovery process, difficulties in psychological adaptation, and an increased risk of complications in subsequent pregnancies are considered negative aspects of such an approach. Therefore, the acceptance of cesarean section as an absolutely safe method has no scientific basis. Analysis conducted in the national context shows that the increase in the frequency of cesarean sections in Uzbekistan is closely related to some organizational and social problems in the healthcare system. The insufficient development of an individual approach to childbirth, the low psychological readiness of pregnant women for the childbirth process, and the high workload of medical personnel increase the likelihood of resorting to operative delivery. At the same time, the formation of positive social attitudes towards cesarean sections in the urban environment also appears to be an accelerating factor in this process. A comparative analysis of the results of the study and the existing literature shows that reducing the frequency of cesarean sections should not be limited to clinical decisions alone. This process requires an integrated approach. In particular, strengthening educational programs to prepare pregnant women for childbirth, clarifying medical indications and strict adherence to them, as well as improving the skills of medical personnel are of great importance.





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Conclusion

The analysis and discussion show that the expansion of the practice of cesarean section is one of the complex and multifaceted problems of modern obstetrics. It is not enough to explain this process only by medical necessity, since it is directly related to changes in social attitudes in society, organizational capabilities of the health care system, and attitudes towards the birth process. In this sense, the issue of cesarean section is moving beyond the scope of an individual clinical situation and becoming an issue that must be considered at the level of general health policy. The study revealed that the widespread use of cesarean section, while providing short-term convenience and control, can have a negative impact on the health of the mother and child in the long term. Especially in cases where there is a possibility of physiological childbirth, the choice of operative method is manifested as a factor affecting the processes of perinatal adaptation and the subsequent reproductive potential of the female organism. This situation once again confirms the need for caution and individual assessment in obstetric practice. In the national context, in particular in the case of Uzbekistan, it was found that the increase in the frequency of cesarean sections is closely related to the existing capabilities and limitations of the healthcare system. The lack of full compliance with modern clinical protocols during childbirth, insufficient preparation of pregnant women for childbirth, and insufficient development of a preventive approach in the process of medical decision-making contribute to this situation. Therefore, measures aimed at reducing cesarean sections require a broader, systematic approach, not limited to the activities of doctors. The final conclusions show that optimizing cesarean sections is one of the important conditions for strengthening the health of mothers and children. For this, it is important to form a scientifically based, careful and individual approach to the labor process, promote the benefits of physiological childbirth, and ensure the validity of medical decisions. This approach, while improving perinatal outcomes, will serve to rationally use resources in the healthcare system and strengthen the health of future generations.

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