Towards to a lower rate of cesarean delivery on maternal request : stick to indication

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In the past several decades, a pattern of rapid increase in cesarean delivery rates has been observed worldwide, though this increase has varied across regions, cesarean delivery without an medical indication has become a major public health concern,among which cesarean delivery on maternal request(CDMR) without benefits for maternal or neonatal health could not be neglected.

In the United States around 30 % of women deliver by cesarean section, and across Europe general cesarean section rates vary from 17% to 52 %. In European countries, the cesarean delivery rates vary from 52.2% in Cyprus to 14.8% in Iceland, with rates in the United Kingdom ranging from 24.6% in England to 29.9% in Northern Ireland. Australia's cesarean delivery rate increased from less than 20% in 1998 to approximately 30% in 2008. In 2014, the cesarean delivery rate in China was 34.9%, with geographic variation ranging from greater than 60% in some supercities to less than 10% in some rural areas. The cesarean delivery rates in China from 2008 to 2018 showed an overall increasing trend. However, the increases in Cesarean rates were not associated with improved perinatal outcomes, regardless of whether starting Cesarean rates were already high or not. On the contrary neonatal intensive care unit admissions increased with increasing Cesarean section rate. After the outbreak of COVID-19, the condition seems to have been getting worse. It is time to stick to medical indication towards to a lower rate of cesarean section before it is too late.

The reasons for the increase of cesarean delivery remain controversial, while it is believed that this increase is largely driven by CS without clinical indication, of which, cesarean delivery on maternal request is one of the important reasons. It is estimated that 2.5% of all births in the United States are cesarean delivery on

maternal request. While in China, the cesarean section rate has been high, because of the lack of research on cesarean section without medical indication, the surgery is facing huge risks. A 18-year retrospective study included 1317774 primiparous women with singleton pregnancy from 1993 to 2010 in 26 counties/cities in 3 provinces in China, they found that the prevalence rates of cesarean delivery and CDMR were 37.6% and 10.0% respectively. CDMR accounted for 26% of all cesarean births. While what really shocked us was the alterations of the trend of CDMR, of which in South cities. The prevalence rates of cesarean delivery and CDMR were 37.6% and 10.0% respectively.CDMR accounted for 26.0births.The prevalence of cesarean delivery increased from 29.4% during the 1993-1995 period to 58.7% during the 2006-2010 in Southern urban area, from 18.2% to 58.3% in Southern rural area and from 4.3% to 49.5% in Northern rural area.The prevalence of CDMR increased by 34 folds from 0.6% during the 1993-1995 period to 21.3% during the 2006-2010 period in Southern urban area by 40 folds from 0.6% to 24.4% in Southern rural area and by 44 folds from 0.6% to 27.3% in Northern rural area.The proportions of CDMR in all cesarean deliveries significantly increased in all three regions.

How should the doctor do when a pregnant woman request for cesarean delivery without medical indication? In our clinical practice, we found that medical staff taking positive interventions, including the method of persuasion and encouragement, could alter the decision that pregnant woman request for cesarean delivery without medical indication. When a woman desires a cesarean delivery on maternal request, the doctor should first be a listener, ask why she want to choose cesarean delivery, and what her main concerns are, and evaluate if she is lack of confidence in vaginal delivery. Some women may specific risk factors, such as age, body mass index, accuracy of estimated gestational age, reproductive plans, personal values, and cultural context. Secondly, the health care provider should be an educator to correct the wrong concepts. The pregnant woman should be informed the advantages of vaginal delivery and disadvantages of cesarean delivery, including the risks of placenta previa, placenta accreta spectrum, and gravid hysterectomy risks. Thirdly, encouragement, encouragement, and also encouragement. In our practice, some women worry that the baby might be macrosomia as the B-ultrasound evaluated and thus have no confidence to try vaginal delivery. Some women fear that the process of vaginal delivery might be too painful to tolerant. Some women afraid that the mode of vaginal delivery could result in laceration of perineum, which might affect the quality of future sexual life and sometimes this is their shameful secret. As a doctor, we should promote the popularization of science and encourage the pregnant women, and save them from these wrong concepts. Last but not least, the extension of epidural analgesia during labor could reduce the fear of pregnant woman for vaginal labor. In my clinical practice, I always encourage that the darkness before dawn will not be long, analgesia used in latent phase of the first stage of labor greatly alleviated the pain. Finally, interventions based on scientific evidence, such as the Robson 10-group classification method could contribute to reduce CS rates.A multi-center cross-sectional study included a total of 73977 randomly selected deliveries in 94 hospitals across 23 provinces in China, in which the authors used a modified Robson classification to characterize CDs, and the WHO C-Model to calculate reference CD rates, they found that The cesarean rate was 38.9% in China in 2015–2016 while the reference rate was 28.5%. This method of Robson classification has not been widely known in China, thus it was rarely used. The promotion of the Robson 10-group classification method might help to reduce the cesarean delivery rates.

All in all, in the absence of maternal or fetal indications for cesarean delivery, a plan for vaginal delivery is safe and appropriate and should be recommended. Furthermore, the government should increase expenditure and train more highly educated obstetricians. Therefore, only with the joint efforts from the government, society, colleges, and medical personnel, can we step towards to a lower rate of cesarean delivery and benefit the maternal and neonatal health.

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