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*Editorial*

# Rising Trends in Primary Cesarean Section in Bangladesh: A Growing Public Health Concern

Bangladesh has achieved remarkable progress in maternal and neonatal health over recent decades. Increased coverage of antenatal care, skilled birth attendance, and institutional deliveries has contributed to substantial reductions in maternal and infant mortality[1,2]. However, this success has been accompanied by a troubling trend: the rapid rise in cesarean section (C-section) deliveries, particularly primary cesarean sections. Once a life-saving intervention for complicated pregnancies, C-sections are increasingly becoming routine, raising medical, ethical, and public health concerns[3,4].

Primary cesarean section—defined as a woman's first C-section—is of particular concern because it often determines delivery mode in subsequent pregnancies[4]. Evidence from national surveys indicates that Bangladesh now has one of the highest cesarean rates globally. The Bangladesh Demographic and Health Survey (BDHS) 2022 reported that approximately 45% of all live births were delivered by C-section, with rates exceeding 50% among first-time mothers[1]. This represents a dramatic rise from just 3% in 1999–2000, signaling a profound shift in childbirth practices[1].

These figures far exceed the World Health Organization (WHO) recommended threshold of 10–15%, beyond which no additional reductions in maternal or neonatal mortality are observed [3]. The overuse of cesarean delivery raises questions about medical necessity and quality of care. Notably, the rise in cesarean sections is uneven: rates are higher in urban areas, among wealthier households, and in private facilities[5,6].

The private sector plays a dominant role. BDHS data show that over 80% of deliveries in private facilities are by C-section, compared to much lower rates in public hospitals[1]. Financial incentives, predictable scheduling, fear of litigation, and provider convenience contribute to this trend[7]. Many women and families rely heavily on provider recommendations, which can limit informed, autonomous decision-making. Cesarean delivery is often presented as the safer or more modern choice, even for low-risk pregnancies[7]. Socioeconomic and cultural factors further fuel the rise. Higher maternal education and household wealth are consistently associated with increased C-section likelihood[5]. Fear of labor pain, concern about perceived risks of vaginal delivery, and social norms linking surgical birth with better care influence decisions[8]. Community-level effects are notable: women in communities where C-sections are common are more likely to undergo the procedure, regardless of clinical need[8].

The consequences of unnecessary primary cesarean sections are substantial. As a major surgery, C-sections carry increased risks of infection, hemorrhage, thromboembolism, and anaesthesia complications[4,9]. They also involve longer recovery times and higher risks in subsequent pregnancies, including placenta previa, placenta accreta, and uterine rupture[4,9]. For newborns, C-sections are linked to respiratory complications and potential long-term immune effects[9].

Beyond health risks, cesarean delivery imposes a significant economic burden. It is costlier than vaginal birth, contributing to high out-of-pocket expenses in a country with limited health insurance coverage [10,11]. At the health system level, overuse diverts resources from essential maternal and neonatal services and from women who genuinely need surgical intervention [10,11].

Addressing the rising trend requires multi-level action. Stronger regulation and monitoring of private healthcare facilities are critical to ensure adherence to evidence-based clinical guidelines[7]. Routine audits, mandatory second opinions for non-emergency C-sections, and standardized labor management protocols can help curb unnecessary procedures[7]. High-quality antenatal counseling is essential to provide women with balanced information about delivery options[7].

Consistent monitoring is a key challenge. The WHO-endorsed Robson Ten-Group Classification System offers a practical method to identify which women—especially low-risk first-time mothers—are driving the surge[3]. Using this system routinely, alongside

regulation, counseling, and provider training, can ensure C-sections are performed for medical necessity, not convenience[3,7].

Healthcare providers must be trained in safe and supportive management of normal labor, while payment and incentive structures should reward quality and appropriateness of care rather than procedural volume[7]. Public awareness campaigns can also help reshape social norms and restore confidence in vaginal birth as a safe and natural option when no complications exist[7,8].

While cesarean sections remain an indispensable part of obstetric care, their overuse—especially as primary procedures—poses serious challenges for maternal and child health in Bangladesh. Ensuring C-sections are performed only when medically indicated is crucial to safeguarding health, reducing financial burden, and sustaining the gains achieved in maternal health [3,4,10]. The focus must shift from convenience and profit toward evidence-based, woman-centered childbirth care[7].

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