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# Rising Cesarean Section Rates in Nepal: Question of safety and Integrity on Obstetric Emergency Practice

Laxmi T<sup>1\*</sup>, Goma DNS<sup>2</sup>, Kumariniraula H<sup>2</sup>, Roshnitui T<sup>3</sup> and Binod A<sup>4</sup>

<sup>1</sup>APS Prasuti Tatha Prajanan Swasthya Kendra, Nepal

<sup>2</sup>Bir Hospital, National Academy of Medical Sciences, Nepal

<sup>3</sup>Ministry of Health, Nepal

<sup>4</sup>Department of Obstetrics and Gynaecology, Karnali Academy of Health Science, Nepal

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\*Corresponding author: Laxmi T, APS Prasuti Tatha Prajanan Swasthya Kendra, Kathmandu, Nepal, Tel: 977-9841562502; Email: laxmitamang@gmail.com

### Abstract

A life-saving obstetric emergency surgical procedure, cesarean section is crucial without its access the large number of pregnant women and their unborn babies die every year across the globe especially in low-income countries. The World Health Organization favours 10-15% cesarean section rate and suggests to be performed only when justified by a medical condition. Otherwise unnecessary health of mother and babies including social and economic implications would challenge childbearing women, babies, their families and the state. Recently in Nepal there is a sharp rising trend of cesarean section rates from 20 to 81% in different hospitals particularly in the private setting indicating over-medicalization of childbirth unnecessarily performing without medically justified.

This arise the issue of human rights violence of childbearing women and professional integrity of a practitioner and safety of the clients. Growing cesarean delivery rate in Nepal urgently calls for healthcare policy makers and professionals to prospectively investigate and monitor its medical, social and economic implications for the society and the nation. The World Health Organization recommended use of the Robson criteria would be one of the best strategies in reducing the frequency of the procedure that should include avoidance of medically unnecessary primary cesarean section and improving case selection for induction and prelabour cesarean section besides educating childbearing women and their families about the consequences of unnecessary request of the procedure.

Keywords: Cesarean section; Violence; Nepal; World health organisation

# Introduction

A cesarean section is life-saving obstetric emergency surgical intervention essential when certain complications arise during pregnancy and labour without its access the large number of women and their unborn babies die every year, especially in low-income countries. Nevertheless, the World Health Organization (WHO) suggests that no region in the world is justified in having a cesarean section rate greater than 10-15% [1]. A 2015 WHO statement concludes that cesarean sections are effective in saving maternal and infants' lives, but only when they are required for medically indicated reasons. It states that, at a population level, cesarean section rates higher than 10% are not associated with reductions in maternal and newborn mortality rates, and it should be performed only when medically justified [2]. Although cesarean is crucial that can save lives, it may also lead to significant and sometime permanent complications, particularly when not justified by a medical condition, expose women to well-documented risks of death, disability and depression including increased health costs [3-5].

Many studies have shown that women who have cesarean section without medical necessities are at high risk of higher rates of infection, pain, pre-hospitalization, breastfeeding challenges, and complications in future pregnancies and even death of childbearing women [6-13]. Additionally, babies delivered by cesarean sections have higher rates of hospital admission, need for ventilation, respiratory morbidity and mortality [6,14-16]. Cesarean section born babies are more likely to have long-term negative health effects, such as asthma, type-1 diabetes, obesity, metabolic diseases and lead to unexplained stillbirths in the second pregnancy [3,17-20]. These risks explain why cesarean on demand or without any maternal and fetus conditions is

considered, an expensive and dangerous luxury, suggesting an urgency of controlling the rate of cesarean sections [21-24].

Despite recommendations and warnings about its risks, cesarean section rates have been constantly increasing across the globe, reaching epidemic proportions in some countries, especially among the urban rich in high, middle and low-income countries and the increase in cesarean rates shows no signs of slowing down [25-27]. Although multi factorial reasons implicated in rising cesarean sections rates, however, it has become a major public health concern and a cause for the debate as it is recognized as the violence of human rights of childbearing women.

## Nepal Context

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 Table 1: Percentage of cesarean section in different hospitals of Nepal.

Hospitals, Location	Rate
Om Hospital, Chabahil, Kathmandu	81%
Medicare Hospital, Chabahil, Kathmandu	79%
Valley Maternity Nursing Home	77%
B & B Hospital	67%
Nepal Police Hospital, Kathmandu	64%
Kathmandu Model Hospital	60%
Kritipur Hospital (managed by Phect Nepal), Kathmandu	51%
Patan Hospital, Lagankel, Lalitpur	47%
Kathmandu Medical College, Sinamangal, Kathmandu	46%
Civil Service Hospital, New Baneshwor, Kathmandu	45%
TU Teaching Hospital, Maharajgunj, Kathmandu	39%
Shree BirendraSainik Hospital (Army Hospital), Kathmandu	33%
BP Koirala Institute of Health Science, Dharan	30%
Nobel Medical College Hospital, Biratangar, Morang	20%
Paropakar Maternity and Women's Hospital (PMWH), Thapathali	17%
Karnali Academy of Health Sciences (KAHS) Teaching Hospital, Jumla	15%
Nepal (Public 12%, Private 35%)	9%
World Health Organization	10-15%

In the recent years like in the most middle and highincome countries there is a rising trend of cesarean births in Nepal, especially in urban settings (Table 1). Studies show that women living in urban, having higher levels of education, on highest wealth quantile and nulliparous are the one who are going through unnecessary cesarean delivery [28-29]. In some hospitals, for instance, in Patan Hospital and Tribhuvan University Teaching Hospital there are growing trend of cesarean section rate from 23% in 2005 to 44% in 2014 and 17% in 2005 to 25% in 2010 respectively indicating declining in normal spontaneous and instrumental vaginal deliveries [30,31]. This indicates that unknowingly these women are becoming the victim of obstetric violence that they are unaware of so do the medical professionals are becoming perpetrators, which are they are unaware of because of own ignorance [32,33].

A senior consultant obstetrician and researcher of Nepal, Professor Ganesh Dangal asserts that obstetric violence is common in Nepal that yet to be researched. Paradoxically, in rural Nepal women are facing life threating challenge to give complicated birth because of lack of access of obstetric emergency service where as in urban areas there is a medicalization of childbirth with unnecessary biomedical intervention treating physiological reproductive processes as biomedical problems that can be treated by the medical profession [2,34,35].

With great concern while enquiring about alarmingly escalating cesarean rates in Nepal some professionals, especially obstetricians assert that women are the one who prefer and request for cesarean delivery. However, studies in different settings including Nepal reveal that such assertion has no valid evidence to prove that actually it is because of maternal request unnecessarily cesarean sections have been performed [36-44]. Moreover, the American College of Obstetricians and Gynecologists [45] clearly states that cesarean delivery on maternal request should not be motivated and recommended acknowledging the potential risks of the procedure instead in the absence of maternal or fetal indications for cesarean delivery, a plan for vaginal delivery is safe and appropriate and should be recommended for clients.

Everyone working to improve maternal health care strives towards common goal, healthy mothers, and healthy babies; however, medical model of care can either protect or violate the fundamental human rights of childbearing women. There is a growing concern among women's rights and human rights advocates, and health research professionals regarding overmedicalization and commercialization of childbirth, particularly in the case of low risk pregnancy and that the cesarean section rate, recognizing as a violation of human rights in childbirth and suggesting for social model of care to empower childbearing women [46].

# Conclusion

To effectively control the increasing rate of cesarean section in Nepal, the government of Nepal should develop specific policies and measures, such as use of rate of cesarean section without medical necessities as one of the hospital's overall rating components, and popularizing of natural childbirth. It is essential to educate reproductive age women providing factual evidence based accurate information on mode of delivery and its implications. Additionally, use of WHO proposes the Robson criteria as a standard for assessing, monitoring and comparing cesarean section rates within healthcare facilities overtime, and between facilities would assist in managing cesarean section rates at both the individual facility and national level by identifying how use of this intervention in specific obstetric subpopulations affects overall cesarean section rates, and how obstetric populations and intervention rates change with time [2, 31,47,48]. Escalating cesarean delivery rate in Nepal urgently calls for healthcare policy makers and professionals to prospectively investigate and monitor its medical, social and economic implications for the society and the nation.

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