Statement On Cesarean Rates

Cesarean rates and the confusion that surrounds them.

There is a surprising lack of clarity amongst various organisations on cesarean rates. It is altogether surprising that rhetoric has replaced - sometimes even dangerously - what is best for the woman, her baby and the family. We believe that a rational evidence based approach to this issue is vital rather than the lazy narrative of the commercialisation of medicine in general and birthing in particular.

The question which begs to be answered is therefore:

"Is there a recommended rate for Cesarean Section?"

The short answer is NO.

However confusion abounds in this aspect and it is worthwhile to take some time to understand the genesis of the canard of 10 to 15% Cesarean rates:

In 1985 the World Health Organization (WHO) stated: "There is no justification for any region to have CS rates higher than 10-15%" *(World Health Organization. Appropriate technology for birth. Lancet 1985; 2 (8452): 436-7).*

The studies on which the WHO based the 15% recommendation 30 years ago were "limited by either having incomplete data or relying on averaged cesarean delivery rates from multiple years without accounting for year-to-year variation in these estimates" *(Molina G, Weiser TG, Lipsitz SR, et al. Relationship between cesarean delivery rate and maternal and neonatal mortality. JAMA 2015; 314: 2263-2270).* Although the methodology of arriving at these rates was not robust - to say the least - and the methodology has come under scrutiny in several publications *(Betran AP, Torloni MR, et al for the WHO Working Group on Caesarean Section. WHO Statement on Caesarean Section Rates. BJOG 2016;123:667–670),* this document has provided fodder to several studies which based the utility of cesarean sections using these figures as a basic assumption.

What is almost always overlooked is that the WHO document looked upon reflected a correlation only with mortality. The rates were never meant to assess Cesarean rates at the level of an individual facility or individual physician or patient. These rates were an indicator of accessibility, availability and utilization of this facility, and is of use to policymakers as an indicator of maternal/perinatal health. *(Betran AP, Merialdi M, Lauer JA, et al. Rates of caesarean section: Analysis of global, regional and national estimates. Pediatric and Perinatal Epidemiology. 2007;21:98-113)*

Morbidity both fetal and maternal was not taken into account for these rates. This was and is an infirmity which has not been addressed even now, adequately, to arrive at a uniform cesarean rate. It is also true that what is not considered are the longer term effects of birth on women; in particular, pelvic organ prolapse, anal sphincter injury, sexual dysfunction, fistulae, urinary incontinence (UI) and others.

It is therefore not surprising to see data where the 10 to 15% cesarean rate has been found repeatedly wanting. None of the countries with a stillbirth rate of 2-4 /1000 have a Caesarean Sec on rate between the World Health Organisation recommended 10-15% threshold. *(Leddy MA, Power ML, Schulkin J (2008) The Impact of Maternal Obesity on Maternal and Fetal Health. Rev Obstet Gynecol 1: 170-178).*

An elegant report cites that previously recommended national target rates for cesarean deliveries may be too low. The same report goes on to say that the focus of discussion about CS rates should be on "supporting safe and appropriate provision of cesarean delivery . with the intent of reducing maternal and neonatal mortality without causing overuse of procedures".*(Molina G, Weiser TG, Lipsitz SR, et al. Relationship between cesarean delivery rate and maternal and neonatal mortality. JAMA 2015; 314: 2263-2270)* However, it was also clear that there is a "complex interplay between overall maternal health resources, emergency obstetrical services, and other factors".

Not surprisingly the WHO issued a new statement in 2015 with the headline "Every effort should be made to provide caesarean sections to women in need, rather than striving to achieve a specific rate" World Health Organization. WHO Statement on Caesarean Section Rates. Geneva: World Health Organization; 2015 (WHO/ RHR/ 15.02).

A very recent commentary from the authors involved in the WHO statements notes- "mortality is normally the only outcome considered in the analyses. Maternal and newborn morbidity (eg, obstetric fistula, birth asphyxia), or psychological and social well-being (eg, maternal– infant relationship, women's psychological health or ability to successfully initiate breast feeding) as well as long-term paediatric outcomes should be considered when estimating a rate that would achieve optimal outcomes. However, since there are practically no morbidity data at the population level, it has not been possible to assess the ecological relationship between caesarean section and these other outcomes. The Statement also consolidates the shift in the focus of attention from the search for an optimal caesarean section rate that provides little basis for action, to a practical and feasible proposal: the use of the classification as a standard system to monitor and compare caesarean section rates at the facility or other levels. *(Ana Pilar Betrán, Jun Zhang, Maria Regina Torloni, A Metin Gülmezoglu Evid Based Med December 2016, volume 21, number 6, 237)*

Thus to conclude the current studies and recommendations have two fallacies, one of trying to extrapolate population level data to facility level and focussing on mortality with the exclusion of morbidity either neonatal or maternal.

Indian Data

As per the latest data (National Family Health Survey 2015-16 (NFHS-4), the cesarean rates at population level in India seem to be 17.2 %. The same document goes on to look at Cesarean rates in the private and public sector and whilst the discrepancy in the rates in these two sectors has been commented upon, there is no mention in the commentaries of the fact that the private sector delivers more babies than the public sector in the urban areas and absolutely no indication of morbidity rates either maternal or neonatal in either sector. There is also no acknowledgement of the fact that the lower rates in public sector could simply be a reflection of the paucity of capacity, both infrastructure and human resource.

To reiterate and quote from the WHO working group on cesarean section - *"The time has come to put the debate about the preferable rate of CS on hold.* Let's start to collect data uniformly so that in the near future we will be able to move our focus from CS rates at population level to monitoring and discussing CS rates and outcomes in each group of the Robson classification. Only then will we have the data and evidence that will lead us more clearly to actions to improve care". *(Betran AP, Torloni MR, et al for the WHO Working Group on Caesarean Section. WHO Statement on Caesarean Section Rates. BJOG 2016;123:667–670)*

FOGSI recommends the setting up of a cloud based registry linked to its website which will collect anonymous data at hospital level using the WHO recommended Robson's ten group classification system.

We would like to emphasise that the hallmark of labor management in the 21st century should be individualized care for the laboring woman with the expectation of a successful and safe vaginal delivery, together with the ability to intervene with a cesarean delivery, if needed, to prevent morbidity and mortality. *(Adapted from Caughey A B BIRTH 41:3 September 2014)*

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