

High Caesarean Delivery Rate in Current Obstetric Practice: Who is to Be Blamed-Patients, Society, Law or Healthcare Providers?

Okafor Innocent Igwebueze*

Department of Obstetrics and Gynecology, Enugu State University Teaching Hospital, Enugu, Nigeria

*Corresponding author: Okafor Innocent Igwebueze, Consultant Obstetrician and Gynecologist, Department of Obstetrics and Gynecology, Enugu State University Teaching Hospital, Enugu, Nigeria, Tel: 2348034006918; E-mail: okaforii@yahoo.com

Rec date: Apr 06, 2016; Acc date: Apr 12, 2016; Pub date: Apr 25, 2016

Copyright: © 2016 Innocent Igwebueze Okafor. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Editorial

Caesarean delivery (CD) is a safe-life-saving procedure that should be available to every woman that needs it [1]. Developments in the history of the procedure started about two centuries ago by series of innovative trials and errors. The advents of surgical sutures by Sanger [2] in 1887, principles of surgical asepsis by Joseph Lister [3] in 1876, lower segment uterine incision by Johnson [4] in 1786, antibiotic therapy, blood transfusion, and safe anesthesia changed the early CD from almost 100% mortality to a very safe procedure in the current obstetric practice. This safety liberalized the indications for CD from being the last resort in a dead or dying pregnant woman, to early resort when the mother and her unborn baby are still healthy, elective procedure, and even CD on demand [4,5].

The CD rate increased rapidly worldwide. The rates ranged from 43.6% to 80% in Brazil [6,7], 32% in America [8], and 27.4% to 30.8% in Enugu, Nigeria [9,10], 22.5% in Canada [11], and 23.8% in United Kingdom [12], and between 22.8% to 25.4% in India with Primigravidas accounting for 42.4% of the cases [13]. These rates were from hospital-based studies. They were higher than the justifiable 10-15% upper limits set by the World Health Organization (WHO) in 1985 [14] above which the procedure is associated with greater risks of maternal and perinatal mortality and morbidity when compared with vaginal delivery. The WHO reference range was intended for a defined 'populations', but it has been mistakenly used for comparing CD rates in healthcare facilities for decades, and has received intense criticism, concern and heated debates [1].

The increase in CD rates is largely driven by a complex multifactorial labyrinth that involves the health systems, health care providers, even fashion and media [15-19]. Other factors include safety of the operation, women and societal demands for improved maternal and fetal outcomes, increased number of high-risk expectant mothers, advances in perinatal fetal monitoring and neonatal survival, loss of obstetric arts of assisted vaginal deliveries, high rate of primary CD, decrease in vaginal births after a CD, and fear of litigation [19-24]. Woman's autonomy, social desire to deliver the baby at a particular date and time, the desire to preserve the perineum for sexual performance, and abuse of the procedure for profit purposes in hospitals are emerging issues [25-28]. These demands by the patients, society, and the Law on the healthcare givers made fetomaternal indications for CD to be endless, confusing, lack uniform definitions, poor in reproducibility, and unsatisfactory in comparisons of CD rates between health facilities [10,29,30]. WHO endorsed the Robson classification [31] as the global standard for assessing, monitoring and comparing CD rates in healthcare facilities due to its simplicity, validity, implementation, and ease of interpretation? The use of the Robson classification, hopefully, will allow comparison of CD rates in

more uniform groups of women, and eliminate confusions and debates.

When CD is medically indicated, it can undoubtedly prevent maternal and perinatal mortality and morbidity. However, CD can be complicated with short- and long-term risks, which can extend beyond the current delivery, and affect future pregnancies. Hemorrhage, blood transfusion, infection, high costs, pulmonary embolism, and maternal deaths are known maternal complications of the procedure [32]. Other long-term complications include aversion to CD and hospital delivery in subsequent pregnancies with many high-risk pregnant women attempting vaginal deliveries with traditional birth attendants. Many of them are referred to hospitals in critical conditions when emergency childbirth complications occur [32]. Perinatal complications, neonatal intensive care units admissions, birth traumas, and deaths continue to rise with the rise in CD rates [28]. Contrary to the belief that high CD rate improves fetomaternal outcomes, a view that fuelled the rising rates of CD; higher rates were associated with a greater risk of maternal and newborn illness and death.

Quality of obstetric care that is safe, effective, efficient, timely, equitable and patient-centered is the key to improvement of maternal and newborn health, and not high CD rates [33-36]. Such quality obstetric services should be available to every woman that needs it including the poor illiterate mothers in the rural areas. Poor infrastructure, lack of well-qualified manpower, and non-availability of essential obstetric services to every woman in resource limited countries pose great risk to women's future reproductive performances especially after one or more CD. The CD rate in ESUTH, Enugu, Nigeria in 2015 was 30.8%. Previous CD (31.9%), severe pre-eclampsia and eclampsia (12.5%), suspected fetal distress (10.6%), poor progress of labor (8.9%), and prolonged labor (8.6%) accounted for 72.5% of the indications for CD [10]. Only 0.2% instrumental vaginal delivery was performed in the institution within the study period [10,35]. This shows the urgent need to resurrect the "dying obstetric arts" of assisted vaginal delivery in current obstetric practice. Term external cephalic version in uncomplicated breech, vaginal birth after a CD, vacuum extraction, and destructive vaginal operations are procedures that can reduce CD rate. Primary caesarean delivery can also be reduced by careful management of labor with partograph, and accurate assessment of fetal distress.

Conclusion

CD is a major surgery, and the decision to perform it must be based on justifiable medical indications and not on mere patient, society or law wishes. It should, ideally, be taken by a consultant obstetrician and not a junior healthcare provider. Evaluations of CD rates using Robson classification will in future provide uniform-defined indications for

CD among the groups of patients for facility comparisons of CD rates in a meaningful, transparent and useful manner that will generate evidence-based data for the improvement of fetomaternal care. Many CDs can be avoided by quality obstetric care and use of obstetric arts of assisted vaginal delivery that are patient-centered. An increase in the rates of CD is a huge burden on the patients, families, societies and the health system. Health authorities, professional bodies, patients, society and law should work as a team to ensure that this safe-life-saving-major operation is neither denied patients that need it nor abused for unjustifiable nonmedical indications. This will avoid litigations or blames to one another when complications occur.

References

1. Betran AP, Torloni MR, Zhang JJ, Gülmezoglu AM (2015) WHO working group on Caesarean Section. WHO Statement on caesarean section rates *BJOG*.
2. Sanger M (1887) My work in reference to the cesarean operation. *Am J Obstet Dis Women Child* 20: 593.
3. Low J (2009) Caesarean section-past and present. *J Obstet Gynaecol Can* 31: 1131-1136.
4. Lopez-Zeno JA, Carlo WA, O'Grady JP, Fanaroff AA (1990) Infant survival following delayed postmortem cesarean delivery. *Obstet Gynecol* 76: 991-992.
5. Penna L, Arulkumaran S (2003) Cesarean section for non-medical reasons. *Int J Gynaecol Obstet* 82: 399-409.
6. Brazilian Ministry of Health (2008). Pesquisa Nacional de Demografia e Saúde da Criança e da Mulher.
7. Hopkins K (2000) Are Brazilian women really choosing to deliver by cesarean? *Soc Sci Med* 51: 725-740.
8. Menacker F, Hamilton BE (2010) Recent trends in cesarean delivery in the United States. *NCHS Data Brief*: 1-8.
9. Ugwu EO, Obioha KC, Okezie OA, Ugwu AO (2011) A five-year survey of caesarean delivery at a Nigerian tertiary hospital. *Ann Med Health Sci Res* 1: 77-83.
10. Okafor Innocent Igwebueze (2015) Indications for Caesarean Delivery in a State University Teaching Hospital, Enugu, Southeast, Nigeria. *International Journal of Nursing and Healthcare* 1: 16-21.
11. Chaillet N, Dumont A (2007) Evidence-based strategies for reducing cesarean section rates: a meta-analysis. *Birth* 34: 53-64.
12. Bragg F, Cromwell DA, Edozien LC, Gurol-Urganci I, Mahmood TA, et al. (2010) Variation in rates of caesarean section among English NHS trusts after accounting for maternal and clinical risk: cross sectional study. *BMJ* 341: c5065.
13. Kambo I, Bedi N, Dhillon BS, Saxena NC (2002) A critical appraisal of cesarean section rates at teaching hospitals in India. *Int J Gynaecol Obstet* 79: 151-158.
14. Appropriate technology for birth (1985) *Lancet* 2: 436-437.
15. Fioretti BT, Reiter M, Betrán AP, Torloni MR (2015) Googling caesarean section: a survey on the quality of the information available on the Internet. *BJOG* 122: 731-739.
16. Torloni MR, Campos Mansilla B, Meriardi M, Betrán AP (2014) What do popular Spanish women's magazines say about caesarean section? A 21-year survey. *BJOG* 121: 548-555.
17. Mazzoni A, Althabe F, Liu NH, Bonotti AM, Gibbons L, et al. (2011) Women's preference for caesarean section: a systematic review and meta-analysis of observational studies. *BJOG* 118: 391-399.
18. Fuglenes D, Oian P, Kristiansen IS (2009) Obstetricians' choice of cesarean delivery in ambiguous cases: is it influenced by risk attitude or fear of complaints and litigation? *Am J Obstet Gynecol* 200: 48.
19. Hellerstein S, Feldman S, Duan T (2015) China's 50% caesarean delivery rate: is it too high? *BJOG* 122: 160-164.
20. Shehu DJ (1992) Socio-cultural factors in the causation of maternal morbidity and mortality in Sokoto. In: Kisekka M editor. *Women's Health Issues in Nigeria*. Zaria: Tamaza Publishing Company Limited p: 203-214.
21. American College of Obstetricians and Gynecologists (2010) ACOG Practice bulletin no. 115: Vaginal birth after previous cesarean delivery. *Obstet Gynecol* 116: 450-463.
22. Declercq E, Menacker F, Macdorman M (2006) Maternal risk profiles and the primary cesarean rate in the United States, 1991-2002. *Am J Public Health* 96: 867-872.
23. Minkoff H (2012) Fear of litigation and cesarean section rates. *Semin Perinatol* 36: 390-394.
24. Schiffrin BS, Cohen WR (2013) The effect of malpractice claims on the use of caesarean section. *Best Pract Res Clin Obstet Gynaecol* 27: 269-283.
25. Padmadas SS, Kumar S, Nair SB, Kumari A (2000) Caesarean section delivery in Kerala, India: evidence from a National Family Health Survey. *Soc Sci Med* 51: 511-521.
26. Chacham AS, Perpetuo IHO (1998) The incidence of cesarean section in Belo Horizonte Brazil: Social and economic determinants. *Reprod Health Matters* 6: 115-21.
27. Mishra US, Ramanathan M (2002) Delivery-related complications and determinants of caesarean section rates in India. *Health Policy Plan* 17: 90-98.
28. Villar J, Valladares E, Wojdyla D, Zavaleta N, Carroli G, et al. (2006) Caesarean delivery rates and pregnancy outcomes: the 2005 WHO global survey on maternal and perinatal health in Latin America. *Lancet* 367: 1819-1829.
29. Barber EL, Lundsberg LS, Belanger K, Pettker CM, Funai EF, et al. (2011) Indications contributing to the increasing cesarean delivery rate. *Obstet Gynecol* 118: 29-38.
30. Torloni MR, Betran AP, Souza JP, Widmer M, Allen T, et al. (2011) Classifications for caesarean section: a systematic review. *PLoS One* 6: e14566.
31. Robson MS (2001) Classification of caesarean sections. *Fetal Matern Med Rev* 12: 23-39.
32. Okafor II, Arinze-Onyia SU2, Ohayi S3, Onyekpa JI4, Ugwu EO5 (2015) Audit of childbirth emergency referrals by trained traditional birth attendants in Enugu, Southeast, Nigeria. *Ann Med Health Sci Res* 5: 305-310.
33. Li T, Rhoads GG, Smulian J, Demissie K, Wartenberg D, et al. (2003) Physician cesarean delivery rates and risk-adjusted perinatal outcomes. *Obstet Gynecol* 101: 1204-1212.
34. Okafor Innocent Igwebueze (2015) Clinical audit of quality of intrapartum care in a State University Teaching Hospital, Enugu, Southeast, Nigeria. *J Women's Health Care* 4: 249.
35. Koblinsky M, Matthews Z, Hussein J, Mavalankar D, Mridha MK, et al. (2006) Going to scale with professional skilled care. *Lancet* 368: 1377-1386.
36. Institute of Medicine (2001) *Crossing the Quality Chasm: A New Health System for the 21st Century*.