# C-section Safety & Quality: The South Asian Context.

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#### INTRODUCTION

- Every major advance in medical science and technology brings high hopes of improving the health and wellbeing of people across the world.
- It also places a great responsibility upon the medical profession and health system managers to **optimally utilize the new knowledge and tools** to confer the greatest benefit and the least harm.
- The caesarean section has emerged as a glaring example of a valuable medical procedure having undesirable social consequences because of inappropriate utilization.
- It is particularly painful that a procedure that is primarily intended to protect the lives and health of pregnant women and newborns, by ensuring safe child birth under difficult circumstances, should paradoxically result in harm to both because of unwarranted profligate use.

## C- SECTION VS NORMAL VAGINAL BIRTH

C-sections were developed

to deal with

life threatening medical conditions during delivery,

*but is....* 

being practiced

irrationally for profit and convenience.

# MAIN BROAD DETERMINANTS OF PREFORMING AND UTILIZING C- SECTION DELIVERIES

Medical condition on which doctor takes decision of conducting C-Section

Non-medical reasons i.e. economic socio cultural

C-Section

Institutional capacity to conduct cesarean deliveries

## WHY THERE IS A PROLIFERATION OF UNSCIENTIFIC PRACTICES?

- Higher income for the doctor and the hospital in private sector
- More money for a **patient's longer stay** and medical attention.
- Foraduates of private medical college to make up for the cost of their education.
- Fear Of litigation- play safe.
- **CDMR**( caesarean delivery on maternal request)
- Auspicious dates 'mahurat baby'
- Tocophobia
- Busy schedule of doctor/mother
- Her own set of belief and bias
- Lifestyle changes
- ► Infertility and Precious baby
- Late marriages and elderly primigravida
- Celebrities: Too Posh To Push

### CONTRIBUTORS TO AN UNSAFE SURGICAL ECOSYSTEM FOR CESAREAN SECTION

LATE REFERRALS
FROM VILLAGES DUE
TO LACK OF
FULLY EQUIPPED
HEALTH CENTRES

SOLO PRACTICE CARE LEAD TO MORE INTERVENTIONS LACK OF 24 HOUR
COVERAGE
OF ANAESTHETISTS,NE
ONATOLOGISTS BLOOD
BANK FACILITIES
DRIVE SOME CENTRES
TO DO EARLY
CAESAREAN SECTIONS

FINANCIAL BARRIERS
MAY MAKE MOTHERS
REFUSE CS IN CERTAIN
SITUATION

WRONG DECISION

LACKING
INFECTION
PREVENTION
PRACTICES

UNTRAINED DOCTORS

NON AVAILABILITY
OF CONSUMABLES
AND DRUGS

UNPLANNED INFRASTRUCTURE

QUALITY COMPROMISE

#### C- SECTION RATES: ASIAN CONTEXT

- Several *South Asian* countries have recorded substantial increases in caesarean section rates over the past decade.
- In *Bangladesh*, rates rose from 2% (2000) to 17% (2011);
- in *India*, from 3% (1992) to 11% (2006); and NFHS-4 is 16.7%
- in *Nepal*, from 1% (2000) to 5% (2011).

# Cesarean births are skyrocketing in India.....a steep increase.....WHY????

Within India, at 58% of all deliveries,

the new state of Telangana has the highest CSR,

a **rate that is higher** than even the

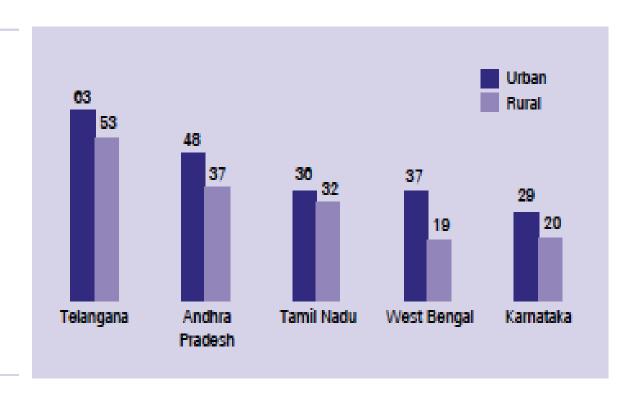
global leader in CSR, Brazil (56%).

- According to a study by Chayan Roy Choudhury, a research scholar of the International Institute for Population Sciences, there is 16.7 per cent rise in c-section cases annually in India, one of the highest in the world.
- Recent data from the National Family Health Survey 2014-15 (NFHS-4) reveals that at the *all India level the rate of C-sections have doubled over the last decade, while in last 20 years,* it has risen six times.
- In some states like Telangana, Tripura, West Bengal, Kerala, Goa, Andhra Pradesh and Tamil Nadu, the rate is alarmingly high, with Telangana (58%) having the highest number of C-section deliveries.

#### Figure 3: Caesarean Section Rates in Urban and Rural Residents in Select States in India

(Dr. Upadhyaya's presentation)

Source: NFHS 4



## ACTIONS TAKEN IN INDIA TO CURB THE INCREASING RATES OF C - SECTION

- Maneka Gandhi calls caesarean section surgeries a racket (Feb 23, 2017, retrieved from <a href="http://timesofindia.indiatimes.com/india/alarming-rise-in-caesarean-sections/articleshow/57302940.cms">http://timesofindia.indiatimes.com/india/alarming-rise-in-caesarean-sections/articleshow/57302940.cms</a>)
- An alarming rise in caesarean section surgeries in India, mainly in private hospitals, has come under the scanner leading to over 1.3 lakh people signing an online petition, seeking government intervention to bring in accountability and transparency in institutional deliveries.
- Following the petition, women and child development minister Maneka Gandhi wrote to health minister J P Nadda, suggesting to make it mandatory for hospitals to publicly display the number of c-section surgeries and normal deliveries carried out.
- Profiteering Hospitals Are Driving Alarming Rise in C-Section Deliveries in India...(https://thewire.in/125725/c-sections-health-women-pregnancy/)

#### **CLINICAL ISSUES** RELATED TO C - SECTION

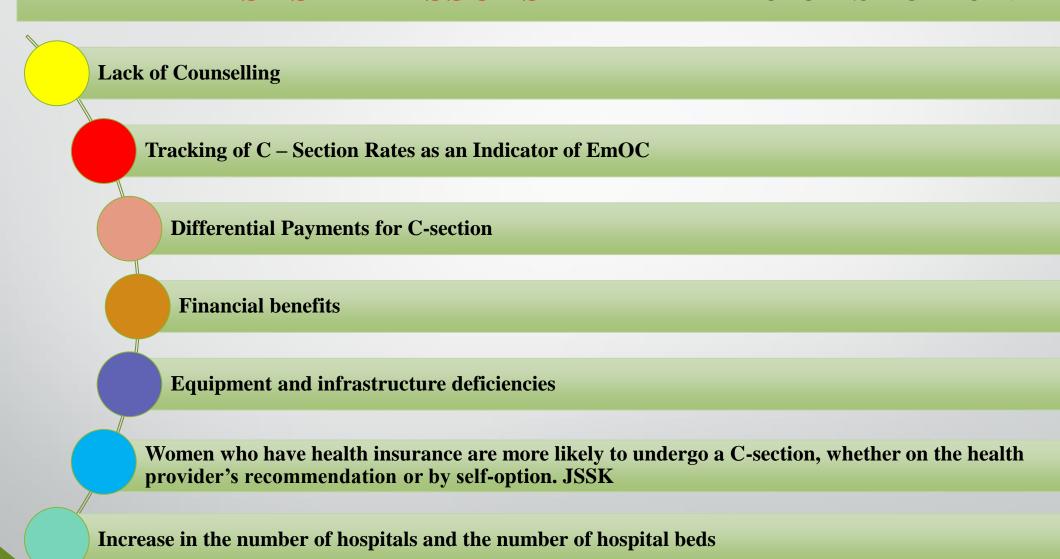
**Improper** indications

Unnecessary CS specially on DEMAND

Lack of skills

Non availability of specialist doctors and consumables in lower health settings

#### **HEALTH SYSTEM ISSUES** RELATED TO C - SECTION



#### **WORKFORCE ISSUES** RELATED TO C - SECTION

- Lack of adequate skilled human resource to manage the increased case load of the normal birthing process.
- Through informal discussions with doctors in public sector facilities, it was shared that the **relative lack of SBAs** (nurses and Auxiliary Nurse Midwives (ANMs)) in public facilities often does not allow them to provide normal delivery services round the clock.
- Fear: Is fear of legal or patient/family repercussions, if something goes wrong during a normal delivery, contributing to increased rates.
- Low awareness: Is low awareness among providers on the adverse impact of unnecessary C-sections contributing to increasing rates?
- Convenience: Does scheduling convenience contribute to increasing CSR?
- Patient demand/pressure: Are patient requests for caesarean contributing to the CSR?
- **Financial benefits and medical education debt:** Are personal/professional financial constraints (high debts from capitation fees and loans incurred), or general financial benefits, contributing to increasing rates?

#### **IRONY!!!!!**

It is an affront to human sensibility when current practice presents us with a picture of healthcare mismatch, where several women who genuinely need the procedure suffer because they cannot access that level of care, while many women who do not need it are subjected to it and exposed to potential harm because of induced demand and unscientific clinical decision making......

Too Much & Too Soon
Too Little & Too Late.....

# KEY AREAS OF ACTION TO RAISE THE PROFILE OF CESAREAN SECTION SAFETY AND QUALITY CONCERNS

## WHAT CAN BE DONE FOR URGENT CORRECTIVE ACTION???/ THE WAY FORWARD

- It is of paramount importance that a **pathway is created for restoring caesarean section to its rightful place** in obstetric practice and can free it from the distortions created by deviant practice patterns.
- Charge an equal, flat fee for both cesarean and vaginal births.
- It is also important to classify cases based on obstetric risk
- 'Schedule' the deliveries in a 'manageable' manner
- Evidence and Research eg health effects of CS on immediate and future outcome
- Standardizing measurement: Adoption of Robson's Classification
- Clinical Establishment Act
- Mothers counseling and pain management
- Role of Midwives (preparing mother for birth and life style modification)

#### Possible Interventions

#### Health Providers

- Guidelines on CS Indications
- Standard Operating Procedures (SOPs)
- Training & Medical Education Strengthen BEMONC
  - Training
  - Training on AVD
  - Awareness on CS
  - Indications
  - Ethics, Teamwork
     & Patient Oriented
     Care
  - Additional Training Items
- Assessment of Skills (OSCEs)
- 5) Awareness on Rising Rates
  - Journal Articles
  - Professional Body Leadership
- Onsultant Opinion on CS Decision

#### Facilities/Systems

- 1) HR-Recruitment, Training & Staffing Patterns (Nurses, M. O.s., Skills Tests, Specialists)
- Equal Payment/ Incentives for NVD/CS (private)
- Improve Environment, Infrastructure and Organization
- 4) Monitoring CSR (alone)
- Monitoring & Auditing, Beyond CSR
- OI Departments and Teams
- Record Keeping/Legal Safeguard
- 8) Medico Legal Counseling/Support

#### Policy/ Government

- 1) Core Group Formation
- 2) Ensuring BEMONC and CemONC Availability in Periphery
- Development of a Midwifery Cadre
- Mandatory Relicensure/CME Credits
- Enhancing Evidence, Based Medicine and Research
- O) Awareness
- Standardization and Monitoring
- Enforcement of
   Clinical Establishment
   Act
- 9) Accreditation for Labor Rooms
- 10) Equal Payment/ Incentive for NVD/CS (public)

#### Client/Patients & Community

- Counseling & Social Support
- Community
   Awareness and Monitoring
- 3) Consent Forms
- Lifestyle
   Modifications
   (lower blood sugar,
   BMI, etc.)

#### **HEALTH PROVIDERS**

- ✓ Guidelines on CS Indications
- ✓ Standard Operating Procedures (SOPs) for the Labour Room
- ✓ Training & Medical Education
- ✓ Training on Assisted Vaginal Deliveries (AVD)
- ✓ Awareness on Indications for C-section
- ✓ Assessment of Skills
- ✓ Awareness on Rising Rates of Caesarean

#### FACILITY/SYSTEM INTERVENTIONS

- ✓ Human Resources -Recruitment, Training and Staffing Patterns
- ✓ Equal Payment/Incentives for NVD/CS (Private Facilities)
- ✓ Improve Environment, Infrastructure and Organization of Facilities
- ✓ Monitoring Caesarean Rates
- ✓ Monitoring and Auditing, Beyond CSR
- ✓ Quality Improvement Departments and Teams
- ✓ Record Keeping/Legal Safeguards

#### POLICY/GOVERNMENT

- ✓ Core Group Formation
- ✓ Ensuring BEmONC and CEmONC Availability in Periphery
- ✓ Development of a Midwifery Cadre to avoid over modernization
- ✓ Awareness and counselling the mother
- ✓ Standardization and Monitoring
- ✓ Counselling & Social Support

#### IMPLICATIONS OF C-SECTION

Serious short-term and long term risks and complications associated with the procedure.

#### The common (more frequent than 1 in 100 cases) risks include:

- Persistent wound and abdominal discomfort in the few months following the surgery
- Chances of a repeat C-section in subsequent deliveries (about 25%)
- Excessive blood loss in the intra-operative period
- Infection

#### The **relatively rare**, but usually serious, maternal complications include:

- Need for additional surgeries, such as an emergency hysterectomy or other surgeries later
- Admission into the ICU
- Uterine rupture/scar dehiscence, placenta praevia, stillbirths in subsequent pregnancies
- Thrombosis, and even stroke
- Urinary tract and bowel injuries
- Severe and long-lasting pain
- Longer hospitalisation and re-hospitalisation
- Death of the woman (due to either the surgery or the anaesthesia)

Every effort should be made to provide cesarean sections to woman in need, rather than striving to achieve a particular rate .......

Evidence have showed that facilities that follow a midwife – led or a combined midwife – doctor model for delivery have higher rates of vaginal delivery and less medical interventions during labour, when compared to obstetrician led delivery care.....

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#### Robson classification



Nulliparous women with single cephalic pregnancy ≥37 weeks gestation in spontaneous labour



All nulliparous women with a single breech pregnancy



Nulliparous women with single cephalic pregnancy. ≥37 weeks gestation who either had labour induced or were delivered by caesarean section before labour



All multiparous women with a single breech pregnancy. including women with previous uterine scars



uterine scar, with single cephalic pregnancy. ≥37 weeks gestation in spontaneous labour



All women with multiple pregnancies, including women with previous uterine scars



Multiparcus women without a previous uterine scar, with single cephalic pregnancy, 237 weeks gestation who either had labour induced or were delivered by caesarean ection before labour



All women with a single pregnancy with a transverse or oblique lie. including women with previous utenne scars



All multiparous women with at least one previous uterine scan with single cephalic pregnancy, ≥37 weeks gestation



All women with a single cephalic pregnancy c37 weeks gestation, including women with previous scars

#### Robson' 10-Group Classification.

No.	Groups
1	Nulliparous, single cephalic, >37 wks in spontaneous labor
2	Nulliparous, single cephalic, >37 wks, induced or CS before labor
3	Multiparous (excluding previous CS), single cephalic, >37 weeks in spontaneous labor
4	Multiparous (excluding previous CS), single cephalic, >37 weeks, induced or CS before labor
5	Previous CS, single cephalic, >37 weeks
6	All nulliparous breeches
7	All multiparous breeches (including previous CS)
8	All multiple pregnancies (including previous CS)
9	All abnormal lies (including previous CS)
10	All single cephalic, <36 wks (including previous CS)

Table 4. Signal functions used to identify basic and comprehensive emergency obstetric care services

Basic services	Comprehensive services
(1) Administer parenteral <sup>1</sup> antibiotics	Perform signal functions 1-7, plus:
(2) Administer uterotonic drugs <sup>2</sup> (i.e. parenteral oxytocin)	(8) Perform surgery (e.g. caesarean section)
(3) Administer parenteral anticonvulsants for pre- eclampsia and eclampsia (i.e. magnesium sulfate).	(9) Perform blood transfusion
(4) Manually remove the placenta	
(5) Remove retained products (e.g. manual vacuum extraction, dilation and curettage)	
Perform assisted vaginal delivery (e.g. vacuum extraction, forceps delivery)	
(7) Perform basic neonatal resuscitation (e.g. with bag and mask)	
, ,	

A basic emergency obstetric care facility is one in which all functions 1-7 are performed.

A comprehensive emergency obstetric care facility is one in which all functions 1–9 are performed.