Early Lessons from Implementing Clinical Safety Checklist (CSC) for Voluntary Female Sterilization in India

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Background

Voluntary female sterilization is the most accepted method of contraception with nearly 4 million procedures performed annually *(HMIS; FY2016-17)*

While simple and safe, the risk of complications, deaths and failure were unacceptably high due to:

- Camp mode vs Fixed Day Service (FDS) mode
- Limited access to institutional services
- Prescribed standards circumvented during service provision
- Critical steps often omitted
Checklists have reduced systems failure in complex procedures such as flying multi-engine aircrafts

- What does a Checklist do: strengthens key practices, reduces the chances of errors, omissions and mishaps
- 19-item WHO Surgical Safety Checklist reduced surgical mortality by >40%
- Clinical Safety Checklist was introduced in India to reduce risk of complications, deaths and failures from voluntary female sterilization
What is the Clinical Safety Checklist?

- Simple, easy to understand bilingual tool
- Not only what to do but also how to do
- Client centred instead of surgeon-centric approach
- Four pause points corresponding to client flow
- Only spells out critical tasks
- Involves nurses in a bigger role and supports shared team work
- Helps in standardizing and enhancing consistency in surgical team performance
- Reduces reliance on memory
**Program Intervention: Geographies**

**CSC implementation in India:**
- **5** States-Assam, Odisha, Chhattisgarh, Telangana & Maharashtra
- **15** Districts
- **186** Facilities
- **1461** nurses and doctors trained

Introduced in **Jan 2017** Chhattisgarh, Odisha, Telangana & **June 2017** in Assam and Maharashtra

**Development and Introduction of the Clinical Safety Checklist in Intervention Facilities**

- National data base of complications, failures and deaths in these 5 States reviewed
- Baseline data on current practices in intervention districts and facilities collected
- Development of the tool by MCSP based on evidenced-based best practices and government guidelines
- Review and inputs of State Technical Working Groups
- Pilot and field testing with providers
- Final tool developed after incorporating feedback
- Introduced in District Orientation Workshops
- Facility Level Orientation of all facility staff done
- Key persons identified who are directly involved in providing voluntary female sterilization services
- Tool use supported on actual FDS days
A total of 22,409 Clinical Safety Checklists (CSCs) were filled for 38,802 voluntary female sterilization surgeries between January 2017 to June 2018.

13,083 checklists were digitized and analyzed.

Results and Key Findings

Quarter-wise trend of filling the ‘Clinical Safety Checklist’

- Qtr-1: 39%
- Qtr-2: 82%
- Qtr-3: 70%
- Qtr-4: 65%
- Qtr-1 2018: 82%
- Qtr-2 2018: 70%
### Quarter-wise Trend of Completeness of Filled Checklists

<table>
<thead>
<tr>
<th>Quarter</th>
<th>2017</th>
<th>2018</th>
<th>Percent Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qtr-1</td>
<td>71%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Qtr-2</td>
<td>49%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Qtr-3</td>
<td>33%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Qtr-4</td>
<td>28%</td>
<td>33%</td>
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</tbody>
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#### Key Events

- **Client re-confirms decision to opt for sterilization**
  - **93%**
  - **84%**

- **Pelvic Examination done**
  - **86%**

- **Sedation and analgesia has been given**
  - **74%**

- **Intra-operative vitals monitored**
  - **85%**

- **Client shifted from OT on trolley or wheelchair**
  - **72%**

- **Post-operative vitals monitored**
  - **84%**

- **Warning signs explained to the client and accompanying adult**
  - **72%**

- **Advice on discharge explained**
  - **-**

**+ Maximum, - Minimum**
Completeness of Select Indicators

- **Is the client prepared for surgery?**
  - Ensures client has emptied bladder: 54%
  - Confirms client identity: 58%
  - Ensures consent form is signed by the client: 58%

- **Client observed for at least four hours after surgery?**
  - Vitals checked and recorded: 38%
  - Surgical dressing checked for soakage: 36%

- **Has sedation and analgesia been given?**
  - Inj. Promethazine (Phenargan): 46%
  - Inj. Pentazocine (Fortwin): 56%
  - Any other: 17%

- **Is surgery done under local anaesthesia (LA)?**
  - 1% Lignocaine used after diluting 2%: 68%
  - Dose calculated as per body weight: 64%
  - Plunger withdrawn before infiltration: 70%
  - Skin, rectus sheath & peritoneum infiltrated: 69%
  - Satisfactory anaesthetic effect checked: 67%
Implementation Challenges: What are we up against?

01. Lack of attention to respectful care: poor explanation of the consent form; intra/post-op monitoring; comfort

02. Lack of client assessment & preparation before surgery

03. Faulty infection prevention practices and technique of surgery

04. HR challenges

05. Faulty perception and behavioral challenges of service providers
How were the identified gaps addressed?

- Advocating for a prevent-identify-refer protocol using CSC with policy makers & technical working groups
- Advocating for and mobilizing existing government funds for logistics, drugs, pulse oximeters and beds
- Developing pause-point wise rosters to meet HR constraints
- Capacity building of surgeons & ancillary staff
- Periodic supportive supervision visits:
  - Supporting use of job-aids,
  - Hand-holding support in use of CSC on FDS days
- Data triangulation and digitization
Program Lessons

A rigorous implementation plan is required to ensure routine and correct use of the checklist.

- Competency based training
- Combined top-down and bottom-up approach required
- Promoting a culture of safety through shared team work
- Cultivating local champions to drive the process
- Regular data analysis & discussion in facility based QI meetings
For more information, please visit www.mcsprogram.org

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