Fistula Care Plus (FC+) Project
Declaration of Interest

- **Goal**: Strengthen capacity
  - fistula prevention
  - fistula detection
  - fistula treatment
  - post-treatment reintegration
  - 2013–2018

USAID funding of FC+ and predecessor projects at EngenderHealth results:
>33,400 fistula surgeries
26,000 health care workers trained

Countries: Bangladesh, Democratic Republic of the Congo, Niger, Nigeria, Togo, Uganda; EngenderHealth also works in Guinea

Tripathi, Engenderhealth 2017
Genital Fistula

- An abnormal opening in the upper or lower female genital tract that causes uncontrollable urinary and/or fecal incontinence
- 1–2 million women living with fistula; 6,000–50,000 new cases per year
- Causes
  - **Obstetric**
    - Inadequate management of prolonged/obstructed labor resulting in ischemia and necrosis of the genital tract along with urinary and/or colorectal tracts
  - **Iatrogenic**
  - **Traumatic injury**
  - **Congenital defect**
  - **Cancer/radiation therapy**
  - **Infection**
“Fistula has virtually been eliminated in most high and middle income countries around the world, so we know that it can be eliminated in every country.

Today, on the International Day to End Obstetric Fistula, I call for an end to fistula within a generation. Let us use the momentum of the Sustainable Development Goals together with strong political leadership, accelerated investment and action, and passionate and committed champions, to achieve this historic and transformative goal.”

Ban Ki-moon

Eradication Equation

Prevent New Cases + Treat Backlog = ERADICATION
The Child Bride Myth of Fistula Eradication

USA 2012 National Statistics: 3,672 <15 yrs gave birth

www.ics.org

CDC Nat’l Vital Statistics 2012
## Fistula Patient Characteristics

Selected baseline characteristics from observational study – median (IQR)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years) at first marriage (n=1239)</td>
<td>15.0 (14.0-18.0)</td>
</tr>
<tr>
<td>Age (years) at fistula occurrence (n=963)</td>
<td>20.3 (17.3-26.8)</td>
</tr>
<tr>
<td>Age (years) at repair (n=1347)</td>
<td>25.0 (20.0-35.0)</td>
</tr>
<tr>
<td>Parity at repair (n=1306)</td>
<td>2.0 (1.0-5.0)</td>
</tr>
<tr>
<td>Had prior repair surgery, n(%) (n=1351)</td>
<td>310 (23.0)</td>
</tr>
<tr>
<td>-Number of previous repairs (n=302)</td>
<td>1.0 (1.0-2.0)</td>
</tr>
</tbody>
</table>

Cole, 2011 Engenderhealth, Fistula Care
### Lessons from History

<table>
<thead>
<tr>
<th>ERADICATION PARADIGM</th>
<th>SDG ERA</th>
<th>AUTO-ERADICATION EARLY 1900’s</th>
</tr>
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<tbody>
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<td>Africa and South Asia</td>
<td></td>
<td>UK. Western Europe and America</td>
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</table>

**Narrative:**
Child brides giving birth before the age of 15 is the root of the challenge and an empowerment platform is best strategy.

**Context:**
Life expectancy at or under 50, pre-antibiotic, pre-flight, few cars or telephones, in addition to...

### SDG-ERA GOALS

<table>
<thead>
<tr>
<th>SDG-ERA GOALS</th>
<th>HISTORIC CONTEXT</th>
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<tbody>
<tr>
<td>Eradicate female genital circumcision</td>
<td>Cliterodectomies &amp; oophorectomies for “hysteria”, on demand of husband</td>
</tr>
<tr>
<td>Adequate childhood nutrition</td>
<td>No public health nutrition programs</td>
</tr>
<tr>
<td>Complete secondary education</td>
<td>Low literacy overall including men</td>
</tr>
<tr>
<td>Marry and give birth after age 18</td>
<td>“Marriage at menarche”, 1st birth quickly</td>
</tr>
</tbody>
</table>
# Lessons from History

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<td><strong>SDG-ERA GOALS</strong></td>
<td><strong>HISTORIC CONTEXT</strong></td>
</tr>
<tr>
<td>Family planning access</td>
<td>Abstinence, lactation, natural, barrier</td>
<td></td>
</tr>
<tr>
<td>Ante-natal &amp; skilled birth care</td>
<td>ANC just beginning among midwives</td>
<td></td>
</tr>
<tr>
<td>Women participate in government</td>
<td>Women had no voting rights, no property rights</td>
<td></td>
</tr>
</tbody>
</table>

- Sexual violence and, in many places, murder. For example: England’s common-law “rule of thumb”
PREVENT: Three Delays Model

Phases of Delay:

1. Phase I: Decision to Seek Care
   - Socioeconomic/Cultural Factors
   - Accessibility of Facilities
   - Quality of Care

2. Phase II: Identifying and Reaching Medical Facility

3. Phase III: Receipt of Adequate and Appropriate Treatment

Thadeus & Maine, 1994
Iatrogenic Fistula—An Emerging Quality of Care Concern

- Raassen et al., 2014
  - Reviewed 5,959 fistula repair cases in 11 countries
  - 13.2% of fistulas were caused by surgical error
    - 80% post-treatment of obstetric complications
    - Causative procedures were performed by all cadres of staff
  - Algorithm proposed for identifying iatrogenic fistula

Raassen, 2014
Iatrogenic Fistula: Additional Evidence

• Ballard et al., 2016, Ethiopia
  – 2,593 fistula cases Hamlin Hospital (2011–2015)
  – 24.6% high bladder fistula, “which predominantly occurs following surgery, specifically cesarean section or emergency hysterectomy....”

• Onsrud et al., 2011, DRC
  – 597 fistula cases Panzi Hospital (2005–2007)
  – 229 women with fistula post-cesarean delivery, 24% iatrogenic

• Benfield et al., 2015, DRC
  – 75% reported to a hospital or health center during early labor

Tripathi, Engenderhealth 2017
FC+ Exploration of Iatrogenic Fistula

Assessment of iatrogenic fistula cases at FC+ supported facilities 2016

- Triangulated data from three sources
  - Routine program monitoring and evaluation (M&E) data from fistula facilities in five countries
  - Survey of clinicians at these sites
  - Case reviews at selected sites in Bangladesh, DRC, Niger

Tripathi, Engenderhealth 2017
Clinician ranking of procedures contributing to iatrogenic fistula

- Caesarean Section
- Repair of ruptured uterus
- Hysterectomy for ruptured uterus
- Gyn hysterectomy - abdominal
- Gyn hysterectomy - vaginal

Average of clinician ranks

Tripathi, Engenderhealth 2017
Key to Fistula Prevention

Fact: Obstructed labor occurs everywhere in the world today.

Premise: “Failure to progress” is the forme fruste of classic obstructed labor that, without intervention, results in the ischemia and necrosis causes obstetric fistula.

A core difference between countries where fistula has been eradicated and countries where it has not been eradicated is in the quality and accessibility of maternity intrapartum services.

Adequate, accessible and reliable Cesarean delivery is the key to prevention of both obstetric fistula caused by untreated “failure to progress” and iatrogenic fistula resulting from Cesarean done poorly.

Safe and effective gynecologic surgery is the key to prevention of iatrogenic fistula resulting from hysterectomy done poorly.

Access to safe, reliable family planning services is a key gynecologic contribution to empowerment of girls and women towards reducing prevalence of all obstetric complications, including fistula.
Key to fistula eradication within a generation

Switch from the broad “empowerment of women and girls” platform to a deep “surgical systems strengthening” platform, within which maternal care operative delivery services will also achieve a minimum acceptable standard of care and equitable geographic distribution.

Maputo Central Hospital, Mozambique, 2016
Ending Fistula Within a Generation: Why Global Obstetrics and Gynaecology Must Participate in the Global Surgery Movement

Lauri Romanzi, MD, FACOG, FPMRS
Project Director
Strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage
Obstetrics & Gynaecology Role in Global Surgery

The Global Surgery Model includes:

- **Three levels of surgical care**
  - Fistula done at higher levels of surgical facility along with other complex reconstructive surgeries
    - *cleft palate, club foot, neonatal surgery*

- **Three cadres of healthcare worker**
  - Surgery, Anesthesia, Obstetrics
    - **“SAO” platform**

- **Three “Bellwether” procedures**
  - Emergency laparotomy, open bone fracture reduction, **Cesarean delivery**
Three Levels of Surgical Care

Service Categories
Dental, Obstetrics & Gynaecology, General Surgery, Injury, Congenital, Visual, Non-Trauma Orthopedics

Increasing Service Complexity, Same Quality & Safety Standards

- Primary Health Center
- First-level Hospital
- Second & Third-level Hospitals

World Bank, DCP, 2015
## Three Levels of Surgical Care

### Table 1.1 The Essential Surgery Package: Procedures and Platforms\(^{a,b}\)

<table>
<thead>
<tr>
<th>Type of procedure</th>
<th>Community facility and primary health center</th>
<th>First-level hospital</th>
<th>Second- and third-level hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental procedures</td>
<td>1. Extraction</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>2. Drainage of dental abscess</td>
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<td></td>
<td>3. Treatment for caries(^d)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetric, gynecologic, and family planning</td>
<td>4. Normal delivery</td>
<td>1. Cesarean birth</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Vacuum extraction/forceps delivery</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Repair obstetric fistula</td>
<td></td>
</tr>
</tbody>
</table>

- \(^a\): Includes dental care.
- \(^b\): Some conditions may require advanced equipment.
- \(^c\): Platform for delivery of procedure.
- \(^d\): May require specialized treatment.

### No Single Service Surgical Facility

- Curettage
- Tubal ligation
- Vasectomy
- Hysterectomy for uterine rupture or intractable postpartum hemorrhage
- Visual inspection with acetic acid and cryotherapy for precancerous cervical lesions
- Drainage of superficial abscess
- Repair of perforations: for example, perforated peptic ulcer, typhoid ileal perforation
Call to action for Ministries of Health to increase the SAO workforce density to 20-40 SAO HCW/100,000 population by 2030 – Currently < 10/100,000 population in countries where fistula persists.
“81 million people are plunged into poverty every year due to lack of surgical services. We have to think in a fundamentally differently way about surgery’s role in healthcare in LMIC. This is not only the right thing to do morally, it is fundamental to ending extreme poverty and boosting shared prosperity.”

www.lancetglobalsurgery.org
https://www.youtube.com/watch?v=bxhdFM7FL9s
Laura Laski @UNFPA sets goal to #EndFistula in 1 generation thru #Commit2Surgery on #IDEOF @ #WHA69 #SurgerySaves

GE Foundation, Jhpiego, Safe Surgery 2020 and 7 others
Eradication for This Generation

"Youth are not just the future. They are here, they are the today." Smriti Thapa

@youth_coalition @youth_Champions #CSW61 #SRHR #Voices