Obstetric Fistula

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Silent Suffering: Maternal Morbidities in Developing Countries

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Why should we care about obstetric fistula?

Limited government resources in many low-income countries severely compromise the effectiveness and efficiency of the health sector and, coupled with overall poverty, undermine people’s capacity to achieve positive outcomes.

(M. Bangser)
Epidemiology of vaginal fistula

- Definition
- Causes
  - Obstructed labor
  - Sexual violence
  - Iatrogenic
Data on Obstetric Fistula

Prevalence:

• Obstetric fistula is correlated with areas where maternal mortality is high (Danso 1996)

• Most frequently cited number = 2 million cases with 50,000 to 100,000 new cases each year.

• Global Burden of Disease estimate = 654,000, 262,000 of those cases in Africa (Stanton et al 2007)

• Nigeria DHS 2008 – prevalence – 0.4% of women have currently or in the past experienced fistula symptoms
Consequences of vaginal fistula

- **Physical consequences**
  - Chronic leakage of urine or feces
  - Urine dermatitis
  - Amenorrhea
  - Vaginal scarring and tissue loss
  - Infertility
  - Bladder stones
  - Decreased bladder size or damage to the bladder neck
  - Infection
  - Footdrop
  - Fever
  - Urinary tract infections

- **Social/ psychological consequences**
  - Stigma, abandonment, isolation
  - Depression
  - Anemia
  - Malnourishment
  - Infertility
Research Findings


• Qualitative and participatory study
• 61 women with fistula; 42 family members; 68 community members; 23 health providers
• Median age at time of fistula was 23; fewer than half the women were younger than 19 when the fistula occurred.
• 50% of women were in their second or higher pregnancy


• Same methodology as the Tanzanian study
• 76 women with fistula; 63 family members; 120 community members; 21 providers and 54 traditional birth attendants.
• Slightly less than half the women were 20 years or older at the time of the fistula; fewer than half were on their 2nd or higher pregnancy.
Determinants of Post-Operative Outcomes in Fistula Repair Surgery: Descriptive Results

- 1429 women enrolled
- 1389 confirmed urinary or rectovaginal fistula
- 1354 had fistula repair surgery
  - 40 women had incontinence unrelated to a fistula
  - 35 women were referred to other facilities, did not have surgery for medical/safety reasons, or treated by catheterization
  - 54 women were discontinued or lost to follow-up
- 1300 (96.0%) returned for 3 month follow-up
## Selected Baseline Characteristics of Women Undergoing Fistula Surgery: Median (IQR)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Median (IQR)</th>
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<tbody>
<tr>
<td>Age (years) at first marriage (n=1239)</td>
<td>15.0 (14.0-18.0)</td>
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<tr>
<td>Age (years) at fistula occurrence (n=963)</td>
<td>20.3 (17.3-26.8)</td>
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<tr>
<td>Age (years) at repair (n=1347)</td>
<td>25.0 (20.0-35.0)</td>
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<tr>
<td>Parity at repair (n=1306)</td>
<td>2.0 (1.0-5.0)</td>
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<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>
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<tr>
<td>Duration (months) of urinary fistula (n=963)</td>
<td>12.0 (4.0-36.5)</td>
</tr>
<tr>
<td>Duration (months) of RVF (n=25)</td>
<td>5.0 (3.0-26.0)</td>
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Median Age at Fistula Occurrence and Repair Among Women Undergoing Fistula Surgery, By Site
### Selected Baseline Characteristics among Women Undergoing Fistula Surgery. n (%)

<table>
<thead>
<tr>
<th>Marital status (n=1334)</th>
<th>Married/living as if married</th>
<th>887 (66.5)</th>
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<tbody>
<tr>
<td></td>
<td>Divorced/separated</td>
<td>355 (26.6)</td>
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<td></td>
<td>Widowed</td>
<td>69 (5.2)</td>
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<tr>
<td></td>
<td>Single</td>
<td>23 (1.7)</td>
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| Education (n=1351)     | Less than primary           | 744 (55.1) |
|                       | Completed primary           | 239 (17.7) |
|                       | Completed secondary         | 34 (2.5)   |
|                       | Higher than secondary       | 6 (0.4)    |
|                       | Religious                   | 299 (22.1) |
|                       | Other                       | 29 (2.2)   |

| Residence (n=1339)    | Rural                       | 1149 (85.8) |
|                       | Semi-urban (town on our form)| 113 (8.4)   |
|                       | Urban (city on our form)     | 77 (5.8)    |
## Living Situation at Baseline Among Women Undergoing Fistula Surgery. n(%)  

| Participant lived with at enrollment (n=1322) (multiple options possible) | Husband | Mother and/or father | Young children | Other relatives | Adult children | In-laws | Friends | Lived alone | Other |
|---|---|---|---|---|---|---|---|---|---|---|
| | 598 (48.3) | 460 (37.1) | 327 (26.4) | 203 (16.4) | 150 (12.1) | 74 (6.0) | 65 (5.3) | 51 (4.0) | 20 (1.6) |

<table>
<thead>
<tr>
<th>Utilities and commodities at residence (n=1324) (multiple options possible)</th>
<th>Radio</th>
<th>Mobile phone</th>
<th>Piped water</th>
<th>Electricity</th>
<th>TV</th>
<th>Refrigerator</th>
<th>Flush toilet</th>
<th>Land line phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>881 (69.2)</td>
<td>457 (36.0)</td>
<td>288 (22.7)</td>
<td>256 (20.1)</td>
<td>199 (15.7)</td>
<td>49 (3.9)</td>
<td>46 (3.6)</td>
<td>24 (1.9)</td>
</tr>
</tbody>
</table>
What are the causes and phases of OF?

- **FACTORS AFFECTING UTILIZATION AND OUTCOME**
  - Socioeconomic/Cultural Factors
  - Accessibility of Facilities
  - Quality of Care

- **PHASES OF DELAY**
  - PHASE I: Decision to Seek Care
  - PHASE II: Identifying and Reaching Medical Facility
  - PHASE III: Receipt of Adequate and Appropriate Treatment
What do we need to do?

• **FOCUS ON PREVENTION**
  – This is the best way to address obstetric fistula
• Family planning – to delay early births and support reproductive intentions
• Correct and consistent use of the partograph – to identify and take action when complications occur
• Immediate catheterization for women after prolonged or obstructed labor – to prevent fistula and/or treat small fresh fistula
• Increase access to emergency obstetric care and improve the quality of cesarean section performance
Treatment of vaginal fistula

• The majority (80-95%) of fistula can be closed surgically
  – Some women will remain with residual incontinence and further research is required to determine the specific causes in this population of women
  – A small number of women may have persistent fistula-related pelvic floor disorders which require alternative solutions

• Increasingly, the field is moving to standardization of care:
  – Counseling and informed consent for pre and post-operative care and support
  – Nursing Care for fistula patients
  – Global Competency-Based Fistula Surgery Training Manual issued in July 2011
  – Standardized indicators compendium for prevention, treatment and reintegration
  – Outreach guidance and cost analysis tool
  – Service delivery and training monitoring tools
  – Community screening protocols
What do we need to do?

• Strengthen or build the capacity to provide treatment services

• Levels of care
  – Prevention at the community and facility level
  – Case identification; diagnosis and referral for surgery to the appropriate level of care
  – Access to repair for “simple” fistula
  – Access to repair for “complex” fistula; training, coaching and mentoring
  – Access to repair for women with “persistent fistula-related pelvic floor disorders”

Reintegration
Thank you