Monitoring the Scale-Up of Vasectomy in Rwanda: Preliminary Results

Théophile Nsengiyumva & Dominick Shattuck

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Overview

• Background of Vasectomy in Africa & Rwanda
• Scale-up Activities
• Monitoring Results
Vasectomy Overview

- **Vasectomy**: simple, safe, effective & low cost
- **Standard approach for isolating vas**
  - No-scalpel vasectomy (NSV)
- **Vasectomy Methods**
  - Ligation and excision (LE) (most common)
    - Failure to azoospermia, between 8% - 13%
  - Combining LE and fascial interposition (FI)
    - Failure reduced to 6%
  - Combining FI with cauterization of vas
    - Lowest risk of failure, 0.15%
Vasectomy in Africa

- Vasectomy is underutilized in Africa
  - Prevalence:
    - 3% worldwide
    - < 0.1% in Africa
  - Exceptions: South Africa, 0.7%, Namibia, 0.4%
  - Example: Ghana’s Permanent Smile Campaign 2000 – 2009
    - 400 vasectomies in about 10 years
    - Vasectomy uptake was limited, despite well developed marketing campaigns
  - There is limited documentation of vasectomy delivery in other Sub-Sahara African countries.
Vasectomy in Rwanda

- Rwanda chose to include vasectomy to expand their method mix
- Previous vasectomy experience in Rwanda:
  - Scalpel vasectomy practiced prior to 1994
  - 2008-2009 NSV training
    - Capacity and Twubakane Projects (IntraHealth)
    - 3 physicians, 4 nurses (expanded to 6 districts)
    - 390 vasectomies in 18 months
    - Clients reported high levels of satisfaction with method
- Experiences provided Rwanda with a technical foundation for additional vasectomy programs.
MOH introduced NSV with TC and FI
- 3 physicians and 4 nurses trained of trainers (TOT)
  - Training included procedure and counseling
- Cascade system deployed in following months
  - Training of physicians and nurses
  - Today capacity to deliver this highly effective method exists in all 30 districts (40 hospitals)
    - Total trained: 64 physicians, 103 nurses
  - Conducted community sensitization activities
- Support from: UNFPA, WHO, USAID Implementing Partners
Vasectomy Scale-Up 2010 - 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Vasectomies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>779</td>
</tr>
<tr>
<td>2011</td>
<td>955</td>
</tr>
<tr>
<td>2012</td>
<td>789</td>
</tr>
<tr>
<td>Total</td>
<td>2,523*</td>
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</tbody>
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*Map created December 2012
Monitoring Vasectomy Scale-Up

- FHI 360 provided technical assistance to RMOH
  - Facilitated TOT with Michel Labrecque, MD
  - Materials, funding, knowledge exchange and project monitoring

- Monitoring objectives
  - Assist MOH by assessing facilitators and barriers to efficient delivery of vasectomy
  - Document Rwanda’s scale-up experience as a learning resource

- Monitoring data sources
  - Training and service statistics
  - Qualitative and quantitative data collection
    - MOH officials, hospital directors, physicians, nurses, CHW, clients & wives
  - Intervention Tracking Tool
Clients and Wives

- Representative sample (5% precision with a 95% confidence interval)
  - Selection:
    - (1) Randomly selected 15 hospitals
    - (2) Randomly selected approximately 20 clients from vasectomy records

<table>
<thead>
<tr>
<th>Characteristics:</th>
<th>Clients (n=316)</th>
<th>Wives (n=300)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>45.5</td>
<td>38.3</td>
</tr>
<tr>
<td>Years Married</td>
<td>17.9</td>
<td></td>
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<tr>
<td>Previous Contraceptive use</td>
<td>87%</td>
<td></td>
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<tr>
<td>Injectables</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td>Pills</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>Implants</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Condoms</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Natural Methods</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Number of Children</td>
<td>5.2</td>
<td></td>
</tr>
</tbody>
</table>

Age of Youngest Child

- 32% 0-1
- 30% 2-3
- 14% 4-5
- 9% 6-7
- 9% 8-9
- 6% 10+

- Representative sample (5% precision with a 95% confidence interval)
  - Selection:
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    - (2) Randomly selected approximately 20 clients from vasectomy records
Deciding on Vasectomy

• Awareness raised through
  – Health care providers (98%)
  – Community meetings (89%)
  – Radio broadcasts (29%)
    • Dr. Kagabo (RMOH) interviews with live call and SMS questions on national radio

• Good first impression
  – Upon learning about the method
    • 80% clients, 82% wives reported favorable feelings about the method

• Couples talked openly about the method

• Key reasons for choosing
  (1) Financial constraints
  (2) Satisfied with family size
  (3) Effects of hormonal methods (wife)

• Clients chose vasectomy despite long travel time
  – 48% traveled more than 3 hours
  – Most traveled by foot
Post-Vasectomy

- No serious adverse events reported
  - 53 (17%) clients reported common post procedure symptoms: abdominal soreness, swelling
    - 42 clients sought medical attention

- Many clients and wives reported improvements in their sex life

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![Post-Vasectomy: Frequency of Sex and Quality of Sex Life](image-url)

- **Client frequency**
- **Client sex life**
- **Wife frequency**
- **Wife sex life**

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**Post-Vasectomy: Frequency of Sex and Quality of Sex Life**

- **Less often/Worse**
- **Stayed Same**
- **More often/Improved**

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**Client frequency**

**Client sex life**

**Wife frequency**

**Wife sex life**

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**USAID**

**FHI 360**

**From the American People**

**The Science of Improving Lives**
Post-Vasectomy

- 52% of clients reported using some form of “pregnancy avoidance” (3 months post-procedure)
  - Modern contraceptive recommended

![Pregnancy avoidance post-vasectomy chart]

- 66% of clients returned for semen analysis (self-reported)
  - No failures
  - Self-reported semen analysis incongruent with hospital records
    - 29% of clients received semen analysis from hospital records
    - No failures in hospital records
Other Findings

- Awareness of LAPM was low among participants
- Clients and wives acknowledge that community level rumors and misconception about vasectomy exist
  - i.e., man will become a woman, reduced sexual interest and pleasure
  - Vasectomy decision a “private matter”
Conclusions

- Vasectomy can play a role in enhancing the method mix in African countries when supported by strong leadership from the MOH and international partners.

- Results of this scale-up effort support male involvement in the family planning discussion.

- Rwanda may provide a reasonable vasectomy scale-up model for other sub-Saharan African countries.
Recommendations: Supply

• Need to maintain number of skilled physicians in NSV TC/FI
  – Sustained training is necessary to account for physician mobility
  – Examine feasibility of incorporating vasectomy training in pre-service education for providers (medical schools)
  – Investigate feasibility of task shifting vasectomy to A0 or A1 level nurses
  – Explore impact of offering vasectomy training to private physicians

• Semen Analysis & Post-Vas Contraception:
  – Strengthen CHW capacity to follow-up with clients and wives
  – Increase laboratory capacity for semen analysis
Recommendations: Demand

- Tailor messages to address rumors and incorporate benefits of vasectomy
  - Emphasize financial and health benefits of limiting family size
  - Utilize existing mechanisms
    - Community meetings, radio and build upon cadre of “mobilizers” (clients)
- Identify new ways to engage men in the health system & promote family planning
  - Focused initiatives
    - ANC/Postpartum counseling
    - Identify appropriate seasonal or workplace vasectomy delivery
Thank You

For additional information:
• Leonard Kagabo, MD, Rwanda MOH: leokagabo@yahoo.fr
• Theophile Nsengiyumva, RN: tnsengiyumva@fhi360.org
• Jennifer Wesson, PhD: jwesson@fhi360.org
• Dominick Shattuck, PhD: dshattuck@fhi360.org
• Trinity Zan, MPH: tzan@fhi360.org
Vasectomy

- **Goal:**
  - Block fertilization by cutting or occluding both vas deferens so that sperm can no longer pass out of the body in ejaculate.