Client Dossier (Clinical Record), Review and Analysis

Research Summary
• **Number of Vasectomies:** 2,523 were performed between 2010–2012 due to rapid scale-up initiated by the Rwandan Ministry of Health (MOH).
• **Client Clinical Records:** 1053 vasectomy clients’ clinical records were randomly selected and reviewed.
• **Client Demographics:** Generally older, married, had previously used family planning and have large families (≥ 5 children).
• **Potential Challenge:** Rumors abound in the community but did not prevent these clients from seeking vasectomy.
• **Primary Reasons for Vasectomy:** Clients chose vasectomy to avoid the financial burden of supporting another child or because they were satisfied with their family size.

The national scale-up efforts in Rwanda since 2010 have focused entirely on no scalpel vasectomy (NSV) with thermal cautery plus fascial interposition. In this article, “vasectomy” refers to this technique unless otherwise noted.

Purpose
Vasectomy, an underused family planning (FP) method in resource-poor settings, is safe, effective, and low cost. The 10-20 minute procedure is also faster and safer than female sterilization. No-scalpel vasectomy (NSV) is the optimal technique because it decreases the risk of surgical complications such as bleeding and infections and has a low failure rate. NSV procedures that use thermal cautery plus fascial interposition (FI) further decrease failure rates and have been found to be appropriate for low-technology and low resource settings.

The Rwandan Ministry of Health (MOH) with technical assistance from FHI 360, took initial steps to increase access to vasectomy as a FP option by training 64 Rwandan physicians and 103 nurses in 42 hospitals across all districts to provide vasectomy. From 2010 through 2012, a total of 2,523 vasectomies have been completed through this program. Scale-up also relied on vasectomy counseling services provided by community health workers (CHWs) and strategic messaging disseminated by the MOH through various media outlets.

Study Objectives and Methods
The MOH asked FHI 360, through the PROGRESS project, to support it in monitoring several aspects of program scale-up. The specific objective of the monitoring effort was to understand institutional, structural, and individual factors influencing the choice of vasectomy in Rwanda and to improve the quality and efficiency of the nationwide program.

To better understand demographics, knowledge, and client perceptions of vasectomy, a client dossier was implemented in district hospitals. Fifteen hospitals with trained medical doctors as of February 1, 2010 were randomly selected, and all existing dossiers of men receiving NSV with thermal cautery and FI (n=1053) were extracted.

Additional data were collected from providers, CHWs, and clients and their wives and are reported elsewhere.*

Results
Table 1 highlights the demographic profile of the 1,053 vasectomy clients whose dossier was analyzed. Data reviewed from dossiers indicate that men choosing NSV with thermal cautery and FI are generally older, predominately married, have similar education to the general population, and have met or exceeded their desired number of children.

The data below from the dossiers vary (significantly in some cases) from the data collected from the clients’ and wives’ interviews. The differences in general are due to missing data within the client dossiers. The most frequently cited reasons for a vasectomy were: financial burden of additional children (36%), satisfaction with the number of children (34%) and the effects of hormone-based contraceptives on their wives (11%), (Figure 1). Prior to this program, clients had little knowledge of vasectomy. The majority of

<table>
<thead>
<tr>
<th>Category</th>
<th>Demographic</th>
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<tbody>
<tr>
<td>Age (Mean)</td>
<td>45 (Client), 38 (Wife)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>94% Married</td>
</tr>
<tr>
<td>Religion</td>
<td>51% Catholic, 29% Protestant</td>
</tr>
<tr>
<td>Education</td>
<td>66% Primary, 22% Secondary</td>
</tr>
<tr>
<td>Used Family Planning Before Vasectomy</td>
<td>77%</td>
</tr>
<tr>
<td>Number of Children (Mean)</td>
<td>5</td>
</tr>
<tr>
<td>Met or Exceeded Desired Number of Children</td>
<td>96%</td>
</tr>
<tr>
<td>Children Under 3 Years Old</td>
<td>59%</td>
</tr>
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clients (77%), however, reported use of other FP methods with partners before vasectomy: injectables (44%), pills (28%), and implants (11%). (Men reporting previous use of a FP method have more education than those who do not use FP). Most clients learned about vasectomy as a FP method from CHWs (41%), nurses (22%) and co-workers (15%).

Challenges to Service Provision

Some barriers were discovered in the dossier review that could undermine efforts to scale-up accessible and effective vasectomies. Most clients walked to and from the clinic (74%), despite medical advice to the contrary. Many of those travelling on foot walked at least 3 hours each way (41%).

While this data collection did not measure vasectomy effectiveness, it did reveal poor adherence to recommended follow-up procedures. Records show that only 29% of dossiers included a completed semen analysis; this represented the greatest missing data of any dossier question. Among dossiers that indicated a semen analysis was done, the majority (64%) of these records had not been signed-off by the proper health professional.

Conclusions

Vasectomy has demonstrated success in Rwanda as an accepted FP method.* This study found that the typical vasectomy client is older, married, has similar education to that of the general population, and has met their desired family size.

Increasing the number of trained doctors in remote settings will improve client access and can shorten travel time. Effort is also needed to make follow-up semen analysis more accessible and culturally acceptable, and to ensure that the procedure is verified by doctors.

* For additional information, see: www.fhi360.org/projects/progress-rwanda.