Utilization of a Locally Assembled Rape Kit in Management of Sexual Violence in Low Resource Settings: Case Study of Kenya

**Principal Investigators:**
Ajema C1, Mukoma W1, Obbayi M1, Digolo L1, Mugyenyi C1, Meme M2, Kotut R1, Oduor S1, and Mulwa R1
Sexual violence is a crime against the state

Evidence collected from survivors plays a pivotal role in the medical management and prosecution of such cases

The Sexual Offences Act (2006) and National guidelines on management of sexual violence
  - Provides a framework for evidence retrieval from survivors
  - Section 33 and 36 of the Sexual Offences Act

Gaps identified:
  - No standards governing evidence collection in health facilities
  - No specified equipment to aid in evidence collection
  - Importance of documented evidence not defined
Study Background

• Collection of medico-legal evidence is key in management of survivors

• However there exists ad hoc collection of evidence from survivors in Kenya:
  - Many health facilities lack equipment required to undertake evidence collection
  - Minimum evidence to be collected from survivors not stipulated

• Maintenance of the evidence chain:
  - Lack of clarity on who should collect evidence? where should it be stored?
Research Question and Objectives

Research Objectives:

1. To develop and test the feasibility of a locally assembled rape kit

2. To develop mechanisms for ensuring that forensic evidence is recorded appropriately
Methodology

- Study Design, Sampling and Data collection:
  - Quasi experimental design
  - 1 intervention and 1 comparison site from Kitui and Homabay Counties respectively.
  - Baseline and evaluation data was collected from 2 police stations and 2 hospitals in 2 counties in Kenya.
  - In-depth interviews with service providers and record reviews
    - Police and health facility records

- Ethics:
  - Ethical approval obtained from a national ethics board
  - Consent obtained from all targeted institutions and participants
End-line data collection

2010

Baseline record review-Police and hospital

2012

Delivery of post rape care services as per national guidelines

Utilization of rape kit

Training of service providers

Assembling of rape kit

Stakeholder meetings

Kitui District

Rachuonyo District
Components of the Intervention

• Consultative meetings on contents of rape kit and training modules
  - Government ministries-Health, Government Chemist, Police, Prosecution

• Assembling, and piloting of rape kit
  - 100 kits were assembled (50 Kits were utilised)

• Training of service providers at intervention site
Demographics

- 501 and 119 survivor records were reviewed (health facilities and police respectively) during the study.

<table>
<thead>
<tr>
<th></th>
<th>Health facility records (n=501)</th>
<th>Police records (n=119)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Below 18 years</td>
<td>Intervention: 198  Comparison: 117</td>
<td>Intervention: 59  Comparison: 20</td>
</tr>
<tr>
<td>Age Above 18 years</td>
<td>Intervention: 117  Comparison: 32</td>
<td>Intervention: 13  Comparison: 8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>315</td>
<td>149</td>
</tr>
</tbody>
</table>

37 survivors did not have ages indicated in the health records, while 19 survivors did not have their ages indicated in the police records.
Type of violence recorded at health facilities

cases reported at health facility as per definitions in the Sexual Offences Act in both sites:
  • Rape
  • Defilement
  • Attempted rape

• Survivors either didn’t report other sexual offences, or these were not documented on the post rape care forms in the health facilities
Service provider feedback on time taken in evidence collection
Before the rape kit

• Survivors required to move across different departments for sample retrieval

• Survivors required to retrieve their own samples
  - Integrity of samples?
  - Chain of custody of samples not clear
  - Survivors expected to deliver samples to the different service delivery points

• Samples were collected by different providers
  - Survivors spent more time in hospital
  - More trauma on survivors
  - Contamination of samples due to poor handling of survivor
  - Results of the tests not filled in the medico-legal forms by all providers
Under utilization of medico-legal forms at baseline

<table>
<thead>
<tr>
<th>Source documents</th>
<th>Intervention site</th>
<th>Comparison site</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>End line</td>
</tr>
<tr>
<td>Trauma Registers</td>
<td>42</td>
<td>56</td>
</tr>
<tr>
<td>P3 forms</td>
<td>26</td>
<td>48</td>
</tr>
<tr>
<td>PRC forms</td>
<td>0</td>
<td>79</td>
</tr>
<tr>
<td>Laboratory</td>
<td>89</td>
<td>179</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td><strong>157</strong></td>
<td><strong>362</strong></td>
</tr>
</tbody>
</table>
After introduction of the kit(1)

Survivor waits at outpatient

Samples obtained using assembled kit

At the Out-Patient (OPD):
Head to toe examination

Samples taken to the laboratory by a health provider for investigations

At the Laboratory:
Samples analysed

Sample results collected by a health provider and returned to the OPD

Survivor given results and referred for counselling and booked for follow up appointment

Survivor waits at outpatient
After introduction of the kit (2)

• Service providers found the kit useful

“The biggest problem in hospitals is that the supply of some of these things {commodities required to retrieve evidence} is not sufficient. ...... That’s why I find this {rape kit} so convenient. Because I’m able to collect evidence and attend to a survivor in a very short time”

Health provider
## Improvement in evidence collection

<table>
<thead>
<tr>
<th>Evidence collected</th>
<th>Intervention Site (n=331)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline Data</td>
</tr>
<tr>
<td>Blood</td>
<td>73 (72%)</td>
</tr>
<tr>
<td>Urine</td>
<td>52 (51%)</td>
</tr>
<tr>
<td>External Swabs</td>
<td>19 (9%)</td>
</tr>
<tr>
<td>High vaginal/Anal Swabs</td>
<td>61 (60%)</td>
</tr>
</tbody>
</table>
Lessons learnt

• Evidence collection at a centralised place reduces trauma
  – Survivors not required to narrate their experience to several providers

• Less time spent in assembling equipment required for evidence collection

• Kit facilitated comprehensive filling in:
  – survivor information and
  – sample analysis results from a central location
Recommendations

– The use of a locally assembled kit facilitates quick retrieval and analysis of samples hence reduction in backlog of specimens awaiting analysis at national forensic laboratory

– Commodities required for evidence collection should be factored in the national supply chain mechanism
  • Scaling up use of kit in public health facilities

– All health providers involved in management of survivors should be trained on basic evidence collection
Thank You!

Contacts

Email: cajema@lvct.org
Websites: www.lvct.org; www.gbvhivonline.org

Twitter:@gbvhivonline

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