Developing New Signal Functions to Assess the Capacity of Health Facilities to Clinically Manage Sexual Violence Survivors in Central Province, Zambia

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The Bigger Picture......

• A 2013 WHO study placed global estimates of violence against women as affecting 1 in 3 women aged 15 years and above.

• VAW classified as “public health problem of epidemic proportions”

• Regardless of perpetrator sexual violence (SV) is a traumatic event associated with a number of mental and physical health sequelae

• WHO describes a set of health services essential for all SV survivors, including
  a) psychosocial counselling,
  b) emergency contraception,
  c) HIV post-exposure prophylaxis (PEP), and
  d) preventative STI treatment
The case for Zambia…..

• Located in sub-Saharan Africa with Population of 14million (2010)

• The 2013-14 ZDHS found that:
  • Over 17% of women (15-49) report having experienced SV in their lifetime
  • SV cases occur in a context of high unintended pregnancy and HIV infection,
  • More than 1 in 8 adults estimated to be HIV positive

• In response the Zambian government established national guidelines for the multi-disciplinary management of sexual and gender-based violence in 2011,
  • These guidelines call for a package of post-sexual violence services to be offered in all government-owned health facilities
Our Study.......  

• Tracking availability of every single component of a particular package of Health Services is not always feasible

• The concept of assessing the availability of a shorter list of indicator signal functions has been applied to a range of service areas including:
  • Basic and emergency obstetric care, antenatal care, child health, emergency neonatal care, and abortion

• We extended this approach to a set of signal functions for the medical management of SV and piloted the framework with data from a health facility census in Central Province, Zambia
Method

- Government master list of all public & private sector health facilities in Central Province
- All operating facilities that serve women=eligible
- All eligible & physically accessible facilities on master list were invited to participate
- Facility assessments conducted by trained nurse research assistants from March to August 2016
- GIS coordinates for all health facilities and police stations & posts
- 2010 Zambian Census of Population and Housing
- Descriptive statistics to assess facility capacity to provide post-SV health services

203 facilities on government list

26 additional facilities found

12 ineligible facilities:
  - 2 not opened yet
  - 9 moved province
  - 1 serves only men

13 facilities refused consent:
  - 11 military
  - 2 government

11 facilities could not be reached

217 eligible facilities

193 facilities studied
<table>
<thead>
<tr>
<th>General staffing &amp; infrastructure</th>
<th>Basic emergency services</th>
<th>Comprehensive services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1+ health professional on duty 24/7</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Room with auditory &amp; visual privacy</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mobile phone or landline</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Electricity</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Improved water source</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Toilet or latrine</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical examination, forensic evidence collection, &amp; injury care</th>
<th>Basic emergency services</th>
<th>Comprehensive services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery bed</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Examination light</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sterilizing equipment</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Vaginal speculum</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Needles &amp; syringes</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Latex gloves</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hand-washing soap or alcohol-based hand rub</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sterile instruments for suturing &amp; repair of tears</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Local anaesthetic for suturing</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unwanted pregnancy, HIV, &amp; STI prevention</th>
<th>Basic emergency services</th>
<th>Comprehensive services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers emergency contraceptive pill or IUD</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Offers HIV post-exposure prophylaxis</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Offers preventative treatment for common STIs (chlamydia, gonorrhoea, syphilis, and trichomoniasis)</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Unwanted pregnancy, HIV, &amp; STI testing &amp; response</th>
<th>Basic emergency services</th>
<th>Comprehensive services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers termination of pregnancy services</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Offers HIV testing &amp; counselling</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Offers testing &amp; counselling for common STIs (chlamydia, gonorrhoea, syphilis, and trichomoniasis)</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Results

• Interviewed 89% of all health facilities in Central Province [N=217, n=93]

• Using the signal functions approach discussed we found:
  • 60% of hospitals [N=10, n=6] and only 5% of health centers (N=143, n=7) fulfil all criteria to provide basic emergency post-SV services
    • Only 2 of the 13 facilities capable of providing basic emergency care have at least 1 health provider on staff who has been trained in providing post-SV services

• Five of 10 hospitals in the study and 1 health center fulfil all criteria to provide comprehensive post-SV services

• No health posts were found to meet the criteria for provision of basic emergency or comprehensive post-SV services
Facilities that can perform domains of basic emergency post-SV care

**GENERAL STAFFING & INFRASTRUCTURE**

- Health Posts (n=40)
- Health Centers (n=143)
- Hospitals (n=10)

- ALL FUNCTIONS
- Mobile phone or landline
- Electricity
- Room with auditory & visual privacy
- Toilet or latrine
- Improved water source

**PHYSICAL EXAMINATION & FORENSIC EVIDENCE COLLECTION**

- Health Posts (n=40)
- Health Centers (n=143)
- Hospitals (n=10)

- ALL FUNCTIONS
- Examination light
- Sterilizing equipment
- Vaginal speculum
- Delivery bed
- Hand-washing soap or hand rub
- Latex gloves
- Needles & syringes

**UNWANTED PREGNANCY, HIV, & STI PREVENTION**

- Health Posts (n=40)
- Health Centers (n=143)
- Hospitals (n=10)

- Offers preventative treatment for STIs
- Offers HIV post-exposure prophylaxis
- Offers emergency contraceptive pill or IUD
- Offers preventative treatment for STIs
Results cont....

• All hospitals able to perform all of the *general staffing and infrastructure functions*, only 15% of health centers and 8% of health posts met all of the necessary criteria

• 1 out of 10 hospitals was unable to perform all of the signal functions for *physical examination and forensic evidence collection*, while 50%+ health centers and posts did not meet criteria

• Majority of facilities at all levels were able to provide *preventative treatment for a range of STIs*
Female population living within a given distance of a facility within Central province

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females living within Central province in 2016</td>
<td>753,448</td>
<td></td>
</tr>
<tr>
<td>Live within 5km of any facility in the study incl. health posts (N=193)</td>
<td>235,844</td>
<td>31%</td>
</tr>
<tr>
<td>Live within 15km of any facility in the study incl health posts (N=193)</td>
<td>637,924</td>
<td>85%</td>
</tr>
<tr>
<td>Live within 5km of a facility meeting the criteria for basic functioning (N=13)</td>
<td>106,316</td>
<td>14%</td>
</tr>
<tr>
<td>Live within 15km of a facility meeting the criteria for basic functioning (N=13)</td>
<td>227,769</td>
<td>30%</td>
</tr>
<tr>
<td>Live within 5km of a facility meeting the criteria for comprehensive functioning (N=6)</td>
<td>86,355</td>
<td>11%</td>
</tr>
<tr>
<td>Live within 15km of a facility meeting the criteria for comprehensive functioning (N=6)</td>
<td>189,744</td>
<td>25%</td>
</tr>
</tbody>
</table>
Conclusions

• This is the first study to apply the signal functions approach to clinical care for sexual violence survivors.

• We have demonstrated that while the majority of hospitals are well equipped to provide post-SV services, few health centers and health posts are able to provide basic emergency clinical care for women who have experienced SV

• Even in facilities that *theoretically* have the capacity to provide basic emergency or comprehensive post-SV services, health providers are unlikely to have received any training in the medical management of SV cases
Conclusions cont...

• In light of the time sensitivity of preventative interventions, decentralization of post-SV care to the health center level and below so that more women can access these critical services is necessary

• The signal functions approach has proven to be a simple and useful way to assess progress towards ensuring universal access to post-sexual violence health services

• Signal functions to be included in routine, multi-country assessment tools such as
  • the Service Provision Assessment (SPA) and the Service Availability and Readiness Assessment (SARA)
Acknowledgements

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End