Perceptions of Ebola and Health Facility Use Among Pregnant and Lactating Women and Community-Level Health Workers in Kenema District—Sierra Leone, September 2014

Michelle Dynes, PhD, MPH, MSN, CNM, RN
EIS Officer, Emergency Response and Recovery Branch
Prepared for IAWG Meeting 2015
Jordan, February 2015
Background
May 26, 2014, Sierra Leone Ministry of Health and Sanitation confirmed presence of Ebola
May 26, 2014, Sierra Leone Ministry of Health and Sanitation confirmed presence of Ebola

May – June 2014, 1/3\textsuperscript{rd} of confirmed Ebola cases in Sierra Leone originated in Kenema District
May 26, 2014, Sierra Leone Ministry of Health and Sanitation confirmed presence of Ebola

May – June 2014, 1/3rd of confirmed Ebola cases in Sierra Leone originated in Kenema District
Welcome to Sierra Leone
Together, we can prevent Ebola.

Report suspected Ebola deaths to the nearest health facility for supervision of the burial.

The body is contagious.

For more information call 117 (toll free).

GOSL
On the road to Kenema
Along the way
Kenema, Sierra Leone
The loss of so many...
REPRODUCTIVE HEALTH IN SIERRA LEONE

1100 maternal deaths per 100,000 live births*


1100 *maternal deaths* per 100,000 live births*

49 *neonatal deaths* per 1,000 live births**


**Save the Children. Surviving the First Day: State of the World's Mothers 2013.*
1100 maternal deaths per 100,000 live births*

Expect more than 13,000 deaths yearly

49 neonatal deaths per 1,000 live births**


## Reproductive Health in Kenema District

<table>
<thead>
<tr>
<th>Care</th>
<th>May Pre-Ebola</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ANC Visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Deliveries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC Visits within 48 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sierra Leone MOHS. Health Data from Kenema District, Sierra Leone—August 2013-September 2014.
## Reproductive Health in Kenema District

<table>
<thead>
<tr>
<th>Care</th>
<th>May Pre-Ebola</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ANC Visits</td>
<td>2,086</td>
<td>1,488</td>
</tr>
<tr>
<td>Facility Deliveries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC Visits within 48 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sierra Leone MOHS. Health Data from Kenema District, Sierra Leone—August 2013-September 2014.
# Reproductive Health in Kenema District

<table>
<thead>
<tr>
<th>Care</th>
<th>May Pre-Ebola</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ANC Visits</td>
<td>2,086</td>
<td>1,488</td>
</tr>
<tr>
<td>Facility Deliveries</td>
<td>1,925</td>
<td>1,541</td>
</tr>
<tr>
<td>PNC Visits within 48 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sierra Leone MOHS. Health Data from Kenema District, Sierra Leone—August 2013-September 2014.
# Reproductive Health in Kenema District

<table>
<thead>
<tr>
<th>Care</th>
<th>May Pre-Ebola</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ANC Visits</td>
<td>2,086</td>
<td>1,488</td>
</tr>
<tr>
<td>Facility Deliveries</td>
<td>1,925</td>
<td>1,541</td>
</tr>
<tr>
<td>PNC Visits within 48 hours</td>
<td>1,923</td>
<td>1,512</td>
</tr>
</tbody>
</table>
## Reproductive Health in Kenema District

<table>
<thead>
<tr>
<th>Care</th>
<th>May Pre-Ebola</th>
<th>July</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 ANC Visits</td>
<td>2,086</td>
<td>1,488</td>
<td>29%</td>
</tr>
<tr>
<td>Facility Deliveries</td>
<td>1,925</td>
<td>1,541</td>
<td>20%</td>
</tr>
<tr>
<td>PNC Visits within 48 hours</td>
<td>1,923</td>
<td>1,512</td>
<td>21%</td>
</tr>
</tbody>
</table>

Sierra Leone MOHS. Health Data from Kenema District, Sierra Leone—August 2013-September 2014.
FGDs with health workers and pregnant and lactating women
Objectives

- Describe perceptions of health facility use for routine health services
- Understand reasons for decreased use of health facilities
- Describe perceptions of safety
- Develop ideas for encouraging facility use
Objectives

- Describe perceptions of health facility use for routine health services
- Understand reasons for decreased use of health facilities
- Describe perceptions of safety
- Develop ideas for encouraging facility use
Objectives

- Describe perceptions of health facility use for routine health services
- Understand reasons for decreased use of health facilities
- Describe perceptions of safety
- Develop ideas for encouraging facility use
Objectives

Describe perceptions of health facility use for routine health services

Understand reasons for decreased use of health facilities

Describe perceptions of safety

Develop ideas for encouraging facility use
Sampling & Participants

• Purposive sampling
• Carried out at 2 CHC, 2 CHP, 2 MCHP
• 5 FGDs with 34 health workers
  – 10 TBAs, 8 MCH aides, 5 vaccinators, 3 nurses, 3 CHO and assistants, 5 support staff
• 4 FGDs with 27 pregnant and lactating women
Sampling & Participants

• Purposive sampling
• Carried out at 2 CHC, 2 CHP, 2 MCHP
• 5 FGDs with 34 health workers
  – 10 TBAs, 8 MCH aides, 5 vaccinators, 3 nurses, 3 CHO and assistants, 5 support staff
• 4 FGDs with 27 pregnant and lactating women
Sampling & Participants

- Purposive sampling
- Carried out at 2 CHC, 2 CHP, 2 MCHP
- 5 FGDs with 34 health workers
  - 10 TBAs, 8 MCH aides, 5 vaccinators, 3 nurses, 3 CHO and assistants, 5 support staff
- 4 FGDs with 27 pregnant and lactating women
Sampling & Participants

• Purposive sampling
• Carried out at 2 CHC, 2 CHP, 2 MCHP
• 5 FGDs with 34 health workers
  – 10 TBAs, 8 MCH aides, 5 vaccinators, 3 nurses, 3 CHO and assistants, 5 support staff
• 4 FGDs with 27 pregnant and lactating women
Data Collection & Analysis

• Structured interview guide with open-ended questions

• Content analysis used on interview notes to group responses into common themes
FINDINGS
OBJECTIVE 1: PERCEPTIONS OF HEALTH FACILITY USE
Perceptions of Health Facility Use
Perceptions of Health Facility Use

• Initial sharp decline in facility use
Perceptions of Health Facility Use

- Initial sharp decline in facility use
- Gradual increase in visits
Perceptions of Health Facility Use

- Initial sharp decline in facility use
- Gradual increase in visits
- Recent IPC trainings have increased use
Perceptions of Health Facility Use

• Initial sharp decline in facility use
• Gradual increase in visits
• Recent IPC trainings have increased use
• Coming to wash their hands!
OBJECTIVE 2: REASONS FOR DECREASED USE
Reasons for Decreased Use

• Fear of contracting Ebola
Reasons for Decreased Use

- Fear of contracting Ebola
- Common misconceptions
Reasons for Decreased Use

• Fear of contracting Ebola
• Common misconceptions

Every person was presumed to have Ebola and sent to ETU
Reasons for Decreased Use

• Fear of contracting Ebola
• Common misconceptions

Every person was presumed to have Ebola and sent to ETU
Health facility staff would inject patients with Ebola or take their blood
Reasons for Decreased Use

• Fear of contracting Ebola
• Common misconceptions

- Every person was presumed to have Ebola and sent to ETU
- Health facility staff would inject patients with Ebola or take their blood
- All vehicles and foreigners were thought to be bringing Ebola
Reasons for Decreased Use

- Fear of contracting Ebola
- Common misconceptions

- Every person was presumed to have Ebola and sent to ETU
- Health facility staff would inject patients with Ebola or take their blood
- All vehicles and foreigners were thought to be bringing Ebola

- People continue to refuse to seek care
OBJECTIVE 3: FEELINGS OF SAFETY AMONG HEALTH WORKERS
Feelings of Safety among Staff

- Ongoing fear among health care staff
Feelings of Safety among Staff

- Ongoing fear among health care staff
- Reports of discontinuing FP methods due to staff fear
“Fear – too much! Fear is always within us. You do not know where your patients have come from.”
“If these other people at the higher health system level can get Ebola and die, then of course we can, too!”
Feelings of Safety among Staff

- Ongoing fear among health care staff
- Reports of discontinuing FP methods due to staff fear
- Reduction in fear following IPC training
Feelings of Safety among Staff

- Ongoing fear among health care staff
- Reports of discontinuing FP methods due to staff fear
- Reduction in fear following IPC training
- Gaps still remain in IPC equipment, especially for TBAs
OBJECTIVE 4: IDEAS FOR ENCOURAGING RETURN TO CARE
Ideas for Encouraging Return to Care

“We don’t just care for Ebola, we can give care for all ailments!”
Ideas for Encouraging Return to Care

“The health workers took good care of you before Ebola, and they will do so now! Come and see how many women are coming for care.”
Ideas for Encouraging Return to Care

• Recent IPC trainings
Ideas for Encouraging Return to Care

- Recent IPC trainings
- Incentives
Ideas for Encouraging Return to Care

• Recent IPC trainings
• Incentives
• Have women share experiences
Ideas for Encouraging Return to Care

- Recent IPC trainings
- Incentives
- Have women share experiences
- TBAs to help spread messages
How can we spread messages to the villages?
Conclusions

Findings contributed towards the *design* of the national IPC strategy
Conclusions

Findings contributed towards the *design* of the national IPC strategy

Clear need to restore communities’ *confidence* in health facilities
Findings contributed towards the *design* of the national IPC strategy

Clear need to restore communities’ *confidence* in health facilities

Engaging *community* is a key strategy to encourage facility use
Perceptions of the Risk for Ebola and Health Facility Use Among Health Workers and Pregnant and Lactating Women — Kenema District, Sierra Leone, September 2014

Michelle M. Silvey, MD,* Laura Mix, MPH,† Yvonne Jans, MPH,‡ Madeb Alu Yank, MD,* Barbara Yowen, DNP,*

(Endorments or use of funds nodified)

With an estimated maternal mortality ratio of 1,000 per 100,000 live births and a neonatal mortality rate of 49 per 1,000 live births, Sierra Leone has the highest maternal mortality ratio in the world, accounting for 2,400 maternal and 11,200 newborn deaths annually (1). Despite the fragile health care infrastructure, the Ebola virus disease (EVD) epidemic might put pregnant women and their newborns at even greater risk for adverse outcomes.

During May–July 2014, one third of confirmed EVD cases in Sierra Leone originated in Kenema District (population: 533,000), located in the Eastern Province (2). During this period, routine maternal and newborn health service use was reported by the Sierra Leone Ministry of Health and Sanitation (MOWH) to have declined across the district (Sierra Leone MOWH, unpublished data, 2014). For example, the number of maternal antenatal care visits in the district decreased by 29%, from 2,006 in May to 1,488 in July, and the number of postnatal care visits within 48 hours after delivery decreased by 33%, from 1,025 to May 1,512 in July (Sierra Leone MOWH, unpublished data, 2014). To understand factors that might have contributed to these declines and explore approaches to increase use of maternal and newborn health services during the EVD epidemic, MOWH collaborated with the International Rescue Committee, the Kenya District Health Management Team, and CDC to assess attitudes and perceptions regarding the risk for EVD and health facility use among health workers and pregnant and lactating women.

In Kenema District, community-level maternal, newborn, and child health services are available at community health centers, health posts, and maternal and child health posts. During September 2014, five focus group discussions with a total of 34 participants who were health workers and support staff were held at six primary health care facilities, and four focus group discussions with a total of 27 participants were held with pregnant and lactating women in Kenema District. Facilitators in varying distance from referral hospitals were chosen to improve representativeness of the information. Health worker participants included 10 traditional birth attendants, eight maternal and child health aides, five vaccinators, three nurses, three community health officers and assistants, and five support staff.

A structured interview guide was used to ask open-ended questions covering the following areas: 1) health facility use for routine health services; 2) barriers for decreased use; 3) ideas for encouraging women and children to return to the facility for care and 4) perceptions of safety. Content analysis was used on interview notes to group responses into common themes. Responses were repeatedly and systematically reviewed until no new themes emerged.

**Perceptions of Health Facility Use.** Health workers, support staff, and pregnant and lactating women reported a sharp decline in facility use for routine health services immediately after the EVD outbreak began. Deliveries in health facilities were perceived to be less affected by the EVD outbreak compared with antenatal, postnatal, and immunization care. After EVD awareness and educational activities had been implemented, health workers reported that the numbers of antenatal, family planning, and immunization care visits appeared to increase gradually, although most have not yet returned to pre-epidemic levels. Vaccination coverage remained stable in some communities because health workers were directly to villages to vaccinate. Health workers and pregnant and lactating women believed that the mental illness prevention services of health workers, and additional equipment such as containers for hand washing with chlorinated water, has increased use of maternal and infant health services by providing reassurance to the community. Some noted that community members now come to health facilities just for the purpose of washing their hands.

**Perceptions of Reasons for Decreased Use.** There was consensus among facility staff and pregnant and lactating women that the primary reasons for decreased use of health facilities was fear of contracting EVD at a facility, including outpatient facilities. Several common misconceptions were reported by pregnant and lactating women. For example, it was extremely believed that staff was paid for each patient referred and therefore every patient who went to a health facility would be permitted to have EVD and taken to the Kenema Ebola Treatment Unit. Another common misconception was that health facility staff injected patients with EVD or took their blood for financial gain or magical power. All vehicles or foreign or host that...
Acknowledgements

Laura Miller, MPH,  
Health Coordinator, IRC

Mohamed Alex Vandi, MD,  
District Medical Officer, Kenema
District Health Management Team, MOH and Sanitation

Tamba Sam, MPH,  
Senior Health Program Manager, IRC

Barbara Tomczyk, DrPH, RN  
Center for Global Health, CDC

FGD Facilitators: Francess Jongopie, Bobor Vandi, Alice Macarthy, Sheku Sheku

The men and women who kindly gave of their time to participate in the FGDs

For more information please contact Centers for Disease Control and Prevention  
1600 Clifton Road NE, Atlanta, GA 30333  
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348  
E-mail: cdcinfo@cdc.gov  Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.