A surveillance of Ebola outbreak at Télimélé, Guinea Conakry 2014

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Background

• The Global Outbreak Alert and Response Network (GOARN) have been concerned with the diseases outbreak response in the countries for longtime.

• The total number of confirmed, probable, and suspected cases in the West African epidemic of Ebola virus disease reported up to the end of 31 October 2014 is 13567 with 4951 deaths. The Countries those with widespread and intensive transmission are Guinea Conakry, Liberia and Sierra Leon or cases, those with an initial case or cases, or with localized transmission are Nigeria, Sénégal, Mali, USA and Spain.

• Funeral rituals, traditional healer practices, illegal healthcare practices, ineffective contact-tracing of exposed persons, lack of standard precautions and poor health system facilities are major contributor to the Ebola outbreak spreading in society.

• The purpose of this study was to describe transmission of Ebola disease in the community of Télimée, Guinea Conakry.
What we know about transmission of the Ebola virus among humans

• The Ebola virus is transmitted among humans through close and direct physical contact with infected bodily fluids,

• The most infectious body fluids: blood, faeces and vomit.

• The Ebola virus has also been detected in breast milk, urine and semen. In convalescent male, the virus can persist in semen for at least 70 days; one study suggests persistence for more than 90 days.

• Saliva and tears may also carry some risk.

• The Ebola virus can also be transmitted indirectly, by contact with previously contaminated surfaces and objects.
Who is most at risk?

- During an outbreak, those at high risk of infection are:
  - Health workers;
  - Family members or other in close contact with infected people;
  - Mourners who have direct contact with the bodies of diseased as part of burial ceremonies.
Ebola virus disease outbreak in West Africa (18 June 2014)
### Ebola outbreak situation (statistics) of 31 Oct 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Source</th>
<th>Total cases</th>
<th>New Cases</th>
<th>Total deaths</th>
<th>New Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberia</td>
<td>MoH#163, WHO Roadmap 10/31</td>
<td>6,535</td>
<td>None reported</td>
<td>2,413</td>
<td>None reported</td>
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<tr>
<td>Sierra Leone</td>
<td>WHO Roadmap 10/31</td>
<td>5,338</td>
<td>+103</td>
<td>1,510</td>
<td>+10</td>
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<tr>
<td>Guinea</td>
<td>WHO Roadmap 10/31</td>
<td>1,667</td>
<td>-239</td>
<td>1,018</td>
<td>+21</td>
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<tr>
<td>Nigeria</td>
<td>WHO Roadmap 10/31</td>
<td>20</td>
<td>0</td>
<td>8</td>
<td>0</td>
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<tr>
<td>Senegal</td>
<td>WHO Roadmap 10/31</td>
<td>1</td>
<td>0</td>
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<tr>
<td>USA</td>
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</tr>
<tr>
<td>Mali</td>
<td>WHO Roadmap 10/31</td>
<td>1</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13,567</strong></td>
<td><strong>-136</strong></td>
<td><strong>4,951</strong></td>
<td><strong>+31</strong></td>
</tr>
<tr>
<td>DR Congo</td>
<td>UN OCHA 10/07/14</td>
<td>70</td>
<td></td>
<td>42</td>
<td></td>
</tr>
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</table>
Objective

- To identify contacts of ill or deceased persons and

- Tracking the contacts daily for the entire incubation period of 21 days
Methods

• A descriptive study design and audit form was used to collect the data (Retrospective data collected by WHO).

• Two criteria were considered: neighborhood of patients with Ebola disease and participation in burial practices.

• All exposed were under observation for 21 days following exposure.
### Findings

<table>
<thead>
<tr>
<th></th>
<th>Non Ebola</th>
<th>With Ebola</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alive</td>
<td>93</td>
<td>16</td>
<td>109</td>
</tr>
<tr>
<td>Died</td>
<td>0</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>93</td>
<td>25</td>
<td>118</td>
</tr>
</tbody>
</table>

A total of 118 exposed persons were observed for 21 days of which 22% (n=25) of them developed the Ebola disease and 36% (n=9) of them died.
Epidemic curve

Ebola outbreak in May 2014 at Télimélé, Guinea
Personal notes

• To control Ebola outbreak require additional strategies:

  ➢ Early identification and systematic isolation of case: effective contact-tracing, triage system,

  ➢ Social mobilization (improved community awareness about risk factors of Ebola infection and individual protective measures) and involving community leaders

  ➢ Isolation unit or treatment centre of Ebola + strict IPC measures: STANDARD PRECAUTIONS and CONTACT PRECAUTIONS.

  ➢ Safely conducted burial

  ➢ Leadership and good coordination of Ebola outbreak response team on ground.
Exposure to virus can be controlled through the use of protective measures in clinics and hospitals, at community gatherings, or at home.
Acknowledgement

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