Rapid Mortality Surveillance
Bangladesh Perspective

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Introduction

➢ Reliable cause-specific mortality data constitute a crucial resource for health monitoring, service planning and prioritization.

➢ However, in the majority of the world's poorest settings, systematic health and vital event surveillance systems are weak or non-existent. As such, deaths are not counted and causes of death remain unregistered for more than two-thirds of the world's population.

➢ At the end of 2003 data on death registration were available from 115 countries, although they were essentially complete for only 64 countries.
Background - Bangladesh

- Number of Sub districts: 493
- Districts: 64 & Division: 8
- Total Population : 160.5 million
- Population Coverage Under Community RMS: 4 million (0.025%)
- Crude Death Rate: 5.1 (National)
- Estimated Facility Death: 15%
- Community Death: 85%
- 1st COVID-19 case was identified in Bangladesh: March 8, 2020
- Total number of confirmed COVID-19 cases: 4,89,178
- Total number of death: 7,020 (COVID-19 +ve)
RMS sub-district Area in Bangladesh
Rapid Mortality Surveillance

- Community RMS started in 13 sub-districts where Kaliganj model are implemented;
- Health officials of 13 sub districts and 8 districts were trained;
- 650 Health Assistant and 130 supervisors were trained;
- RMS has been started from 10th May 2020 in Bangladesh
- A monitoring team was formed at MIS-DGHS and
- RMS data are monitored and feedback to sub district weekly basis
- Surveillance week starts Sunday ends Saturday
Sources:

• **Community RMS:**
  - Historical death registration data of 13 upazilas from BDRIS
  - Current death notification data of 13 upazilas by HAs using RMS data collection template

• **Facility RMS:**
  - Still RMS data is not integrated with DHIS2.
### Data collection format for community RMS

<table>
<thead>
<tr>
<th>SL No</th>
<th>Union</th>
<th>Ward #</th>
<th>Union level restrictions on movement (stay at home, safe distancing etc.)</th>
<th>House # or contact of family member If house number not available, please include description of house or contact of someone from the family for death registration follow-up when lockdown ends</th>
<th>Age of deceased</th>
<th>Gender of deceased</th>
<th>Date of death DD/MM/YYYY</th>
<th>Place of Death</th>
<th>Injury/accident that led to death (upto two weeks before death)</th>
<th>Recently tested for Covid-19?</th>
<th>Suspected Cause of Death</th>
<th>Remarks</th>
<th>Suspected Cause of Death</th>
<th>Remarks</th>
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<tbody>
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<td>Com. Hosp. Yes No</td>
<td>Yes (tested +ve) Yes (tested -ve) Not tested</td>
<td>High Fever (for atleast 3 days) Extreme Fatigue</td>
<td>Cough</td>
<td>Recent loss of sense of smell or taste Difficulty breathing</td>
<td>Diarrhea</td>
<td>Live, visit, or care for someone with these symptoms or COVID-19</td>
<td>Travel to an area where COVID-19 is present</td>
<td></td>
</tr>
</tbody>
</table>

**Screening questions / Symptoms (tick if yes)**
- High Fever
- Extreme Fatigue
- Cough
- Recent loss of sense of smell or taste
- Difficulty breathing
- Diarrhea
- Live, visit, or care for someone with these symptoms or COVID-19
- Travel to an area where COVID-19 is present
Benefits of RMS in Bangladesh

➢ Establishment of registration systems for entire populations is unlikely to occur in the short to medium term in Bangladesh.

➢ In the meantime, sample-based and sentinel population and mortality surveillance can yield sufficiently reliable and relevant information for Bangladesh.

➢ The data and evidence should be used while efforts continue to be made to improve the evidence base.

➢ RMS data is used to calculate excess mortality for a population of Bangladesh that has a high level death registration or for facility death.
Bangladesh 2020 deaths in people of 0-59 years and 60+ years by week compared to the upper and lower limits (95% CI) of historical average.
COVID-19 Response

• Since the initial outbreak of COVID-19 in Bangladesh earlier this March, Bangladesh is at an economic and social standstill due to the government imposed nation-wide lockdown. Although every sector of the country is facing problems, the health sector is currently among the most affected sectors.

• RMS activities affected by COVID-19 and it is not integrated with DHIS2. Therefore, these data are not being used for policymaking yet.
Challenges

• Country was fully locked down from late March 2020-May 2020
• Domiciliary visit by HA was hampered
• Training done on virtual basis
• Shortage of PPE for field health workers
• Data quality initially was not up to the mark
• Extra burden for field workers
Challenges

• Central monitoring team was involved with COVID-19 surveillance
• Lack of skilled Human Resources.
• Internet connectivity problem.
• Insufficient dedicated human resources.
• Absence of Interoperability.