Introduction to Congenital Anomalies and Surveillance

The MANGO Study
Outline

• Definitions
• Approaches to CA surveillance
# Learning Objectives

By the end of this lesson, participants will be able to:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the significance of congenital anomalies</td>
<td>Explain public health significance of congenital anomalies</td>
</tr>
<tr>
<td>Describe public health Surveillance for congenital anomalies</td>
<td>Explain public health surveillance and its purposes to key stakeholders</td>
</tr>
</tbody>
</table>
Definitions

• Congenital anomalies are defined as abnormalities of body structure or function that are present at birth and are of prenatal origin

• Synonyms
  • Congenital abnormalities
  • Congenital defect
  • Congenital malformations
Significance (WHO 2010)

- 270000 deaths within first 28 days of life (neonatal deaths) globally

- Neural tube defects most serious and most common
Why collect data on Congenital Anomalies?

To gain a better understanding of the burden of and risks for these conditions, refer identified infants to services in a timely manner, and use prevalence estimates to evaluate any current prevention or clinical management programmes.
Public Health Surveillance

• Public health surveillance is defined as the ongoing, systematic collection, analysis and interpretation of health data for public health purposes, and the timely dissemination of public health information for assessment and public health response to reduce morbidity and mortality
  • Planning
  • Implementation
  • Evaluation
Types of Surveillance Programs

• Population based
• Hospital/facility based
• Hybrid of the two

• MANGO is ....
Population vs Facility Based Surveillance

Denominators:
Population = all births in the defined population over specified period
Facility = all births within facility over specified period
Case Ascertainment

• Active – dedicated data abstractors
• Passive – health workers
• Hybrid – both data abstractors and health workers
Case Inclusion

• All CAs
• Selected CAs
• Phased inclusion from selected to all
• Description format
  • Verbatim description
  •Checkbox
  • Photography
MANGO study restricting age of inclusion to neonatal period (<= 28 days)