Low birth weight

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Outline

• Background for target
  – Rationale
  – Definition

• Logical framework joining the indicators

• Proposed outcome indicators
  – Strengths
  – Limitations
  – Data availability

• Proposed process indicators
  – Strengths
  – Limitations
  – Data availability
Background

• Low birth weight infants have a higher risk of adverse outcomes in the perinatal period and in the long term.
• Low birth weight can be due to being small for gestational age or preterm.
• Preterm infants are in general more likely to be small for gestational age
Logical framework

• In order to reduce LBW a number of inputs are necessary
  – Health system [e.g. functioning antenatal care]
  – Individuals and communities [e.g. behaviour change]
  – Intervention availability and access [supply chains, evidence-based protocols, knowledge transfer]
• Reducing LBW requires both nutritional and non-nutritional interventions
• LBW is a proxy for death and severe morbidity
Interventions that reduce LBW

- Balanced protein/energy – 21%
- Iron supplementation – 19%
- Smoking cessation interventions - 17%
- Insecticide-treated nets – 20%
- Antimalarials (1\textsuperscript{st} and 2\textsuperscript{nd} pregnancy) – 43%
- Antenatal antithrombotic therapy in women at risk of placental dysfunction - 59%*
Proposed indicators

• **Target 3**: 30% reduction in LBW by 2025
  – Birth weight < 2500 grams

• **Intermediate outcome indicators**:
  – IO6: Proportion of thin women of reproductive age
  – IO7: Proportion of stunted women of reproductive age
  – IO8: Prevalence of cigarette smoking in pregnant women
  – IO9: Mean maternal age of first child's birth

• **Process indicator**:
  – Proportion of women who have received protein and energy supplements
Indicator /target data availability

Numerator: Low birth-weight prevalence
Denominator: Total live births

• From National Statistical Offices, MoH and other national agencies collecting perinatal data.
• WHO regional databases:

• DHS, MICS and RHS surveys

Countries with no data (1990-2009)

- Central African Republic
- Chad
- Gambia
- Guinea-Bissau
- Democratic People's Republic of Korea
- Monaco
- Myanmar
- Nepal
- Rwanda
- Senegal
- Seychelles
- Sierra Leone
- Somalia
- South Sudan
- Sudan
- Swaziland
- Togo
## LBW trends

<table>
<thead>
<tr>
<th>Region</th>
<th># of datasets (range of data points)</th>
<th>Unweighted Average Slope (change over time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRO</td>
<td>1 (12)</td>
<td>-0.15</td>
</tr>
<tr>
<td>AMRO</td>
<td>34 (2-26)</td>
<td>0.11</td>
</tr>
<tr>
<td>EMRO</td>
<td>16 (2-19)</td>
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<tr>
<td>EURO</td>
<td>51 (4-20)</td>
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<tr>
<td>SEARO</td>
<td>2 (6-8)</td>
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<tr>
<td>WPRO</td>
<td>25 (2-19)</td>
<td>-0.84</td>
</tr>
</tbody>
</table>
Challenges with the indicators

- LBW is affected by non-nutritional interventions
- Country-specific centiles or birth weights could be useful.
- Intermediate outcome indicators are not generally available.
Challenges with interventions

- Most interventions that reduce LBW are not easy to scale up
- Some require behaviour change
- Some may require task shifting/sharing
- Some are limited to facility settings and their overall impact unclear