Preterm pre-labour/premature rupture of membranes (PPROM) – A risk factor for preterm births & neonatal mortality

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Preterm births – the burden

Global burden of preterm birth in 2010

- 15M preterm births occur annually and rates are rising
- 9 of 11 countries with rates > 15% in 2010 were from SSA.
- Sadly these areas have the poorest data quality
Why focus on preterm births?

- Leading cause contributing about 30% NM & 15% U5M globally
  - Gross under-estimate of impact since SBs are usually not counted.
  - Also to childhood and long term morbidity; quality of life; loss of DALYS; loss of human capital re attainment of developmental potential.

- Strategies in SDGs era must go beyond survival to thriving & transformation.

- Returns on investing in preterm births can be substantial.

- Implementation of tested interventions remains the challenge.

- Clearly prevention and early initiation of management prior to delivery is essential.
Addressing for preterm births

- Interventions for addressing morbidity and mortality in PTB could be
  - **Primary**: implemented to all women before onset of pregnancy
  - **Secondary**: eliminating or reducing risk in women identified with RFs or
  - **Tertiary**: started in labour or after delivery to improve outcomes for babies

- 2º and 3º interventions may prolong exposure to hazardous iu environment

- Primary prevention is a desirable goal but tertiary interventions are the most prevalent (WHO guidelines).
Preterm prelabor rupture of membranes (PPROM)?

Defined as spontaneous rupture of the membranes at less than 37 weeks gestation at least 1hr before the onset of contractions.

One of 3 obstetric precursors of preterm birth together with spontaneous preterm labour & maternal and fetal indications.

PPROM believed to contribute 25% to 30% of preterm births.

The primary concern is that its contribution is often overlooked.

Cause is unknown; mechanism via inflammation mainly from *SUIT* acronym for Smoking, Uterine over-distension, Infections, & ?Trauma.
Tertiary prevention of preterm births – for women with imminent PTB

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<tr>
<th>Intervention</th>
<th>Recommendation</th>
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<tr>
<td>Antenatal corticosteroids</td>
<td>Effective for GA 24-34 weeks but strong but conditional recommendation.</td>
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<tr>
<td>Magnesium sulfate for fetal protection vs. neurological complications</td>
<td>Recommended before 32 weeks vs. cerebral palsy</td>
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<tr>
<td>Antibiotic administration for PPROM</td>
<td>Recommended with <strong>Erythromycin</strong> being drug of choice; NOT amoxyl-clavulinate</td>
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**Not recommended**

- Tocolytics; routine antibiotics in PTL & routine delivery by caesarean section
We are not doing enough re. PPROM

- Why do we not look at PPROM in its own right as major contributor to PTB & NMR.
- Lumping as just one of obstetric complications impairs visibility.

- Antibiotics vs PPROM - most clearest & cheapest M-H intervention in WHO guidelines but ACS is the talk of town!!