NEW PNEUMONIA CASE MANAGEMENT GUIDELINES

By
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Outline of the presentation:

• Overview of Child Health situation in Kenya
• Burden of pneumonia
• Global /National efforts against pneumonia
• Evidence for change of pneumonia guidelines
• Current pneumonia guidelines
• Revised pneumonia guidelines
• ROAD MAP
Kenya Child Mortality Indicators (KDHS 2014)

- Under five mortality Rates – 52 per 1000 live births
- Infant mortality Rate – 39 per 1000 live births
- Neonatal Mortality Rate – 22 per 100 live births
- MMR : 358/100,000
PNEUMONIA

- Pneumonia is among the leading causes of death in children under five years
- In Kenya, it is currently responsible for 16% of under five deaths
Kenya, Regional & Global picture on Diarrhoea, Pneumonia & Malaria Mortality

Source: World Health Statistics 2011, WHO

Diarrhoeal diseases: Kenya 21%, Africa 17%, Global 15%

Pneumonia: Kenya 16%, Africa 14%, Global 18%

Malaria: Kenya 11%, Africa 18%, Global 8%
# National Efforts Against Pneumonia (KAPPD): Key Strategies

## Policy and Budget Environment
- Develop policies and strategies that increase the provision of quality health and nutrition services for children
- Continuously explore different financial mechanisms to improve access to MNCH services

## Management of Common Childhood Illnesses
- Scale up IMNCI and nutritional support at facility level
- Scale up IMNCI and nutritional support through community strategy
- Scale up use of ORS and Zinc for diarrhoea
- Scale up use of antibiotic treatment for pneumonia
- Increase uptake of routine services by non attendees through social mobilization
- Introduce new vaccines such as rotavirus and pneumococcal vaccines

## Access to Health Services by Mothers and Children
- Improve procurement and distribution of essential medical supplies
- Strengthen community mobilization and advocacy for the utilization of available services

## Human Resources
- Strengthen and integrate MNCH components within pre-service and in-service training
- Strengthen CHWs knowledge and skills for improved MNCH care
- Build community and facility health worker skills capacity in midwifery, essential newborn care, IMNCI and nutrition

## Communication and Advocacy
- Develop advocacy and communication strategies for MNCH
AMOXICILLIN DISPERSIBLE TABLET
The first line Therapy for Pneumonia for children under Five years: Evidence Base.
### WHO (2005) Hospital Guidelines for Management of Children with Cough / Difficulty in Breathing

#### Syndrome

<table>
<thead>
<tr>
<th>Syndrome</th>
<th>Clinical Signs</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very severe pneumonia</td>
<td>Any one of: cyanosis, grunting (infants), inability to drink, head nodding, altered consciousness, vomiting everything</td>
<td>Inpatient Injectable penicillin + Gentamicin + oxygen, feeds/fluid support</td>
</tr>
<tr>
<td>Severe pneumonia</td>
<td>Lower chest indrawing AND without signs of very severe pneumonia</td>
<td>Inpatient Injectable penicillin only</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Fast breathing (RR≥ϱϬ/ŵiŶ if age ≤ϭϬ; ≥ϰϬ/ŵiŶ if age 12-59 months) AND without signs of severe or very severe pneumonia</td>
<td>Outpatient Oral co-trimoxazole</td>
</tr>
<tr>
<td>No Pneumonia</td>
<td>None of the signs of non-severe, severe or very severe pneumonia</td>
<td>Outpatient No antibiotics</td>
</tr>
</tbody>
</table>
Child Health Evidence Week: Should benzyl penicillin should be replaced with amoxicillin for the treatment severe pneumonia?
Amoxicillin vs benzyl penicillin for indrawing pneumonia in Kenyan children: a pragmatic trial

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Treatment failure 48 hr (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoxicillin</td>
<td>20/260 (7.7)</td>
</tr>
<tr>
<td>Benzyl penicillin</td>
<td>21/261 (8.0)</td>
</tr>
</tbody>
</table>

Risk Difference (95% CI)

-0.3% (-5.0, 4.3)*

*Non-inferiority margin – 7%
Primary Evidence: Treatment Failure

<table>
<thead>
<tr>
<th>Study ID</th>
<th>Risk Difference (95% CI)</th>
<th>Events Amoxicillin</th>
<th>Events Penicillin</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addo Yobo 2004</td>
<td>0.00 (-0.03, 0.04)</td>
<td>167/857</td>
<td>161/845</td>
<td>23.91</td>
</tr>
<tr>
<td>Hazir 2008</td>
<td>-0.01 (-0.03, 0.01)</td>
<td>77/1025</td>
<td>87/1012</td>
<td>60.10</td>
</tr>
<tr>
<td>Agweyu 2014</td>
<td>-0.00 (-0.05, 0.04)</td>
<td>20/263</td>
<td>21/263</td>
<td>15.99</td>
</tr>
<tr>
<td>Overall (I-squared = 0.0%, p = 0.773)</td>
<td>-0.01 (-0.02, 0.01)</td>
<td>264/2145</td>
<td>269/2120</td>
<td>100.00</td>
</tr>
</tbody>
</table>

NOTE: Weights are from random effects analysis.
<table>
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<th>Inpatient</th>
<th>Outpatient</th>
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</thead>
<tbody>
<tr>
<td>Severe pneumonia</td>
<td>Any one of: cyanosis, grunting (infants), inability to drink, head nodding</td>
<td>Injectable penicillin + Gentamicin + oxygen, feeds/fluid support</td>
<td>Oral amoxicillin</td>
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<td>Pneumonia</td>
<td>Lower chest wall indrawing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Fast breathing: ≥40/min if age 12-59 months; ≥25/min if age 60+ months</td>
<td>AND without signs of severe or very severe pneumonia</td>
<td></td>
</tr>
<tr>
<td>No Pneumonia</td>
<td>None of the above signs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AMOXYL DT - ROAD MAP

✓ Research on Oral Amoxyl DT
✓ Dissemination of research findings
✓ PPB included Amoxyl DT in KEML
✓ Amoxyl DT in KEMSA LIST
✓ National stakeholders sensitization
✓ County teams sensitization
✓ 3 Counties and hospitals in CIN Network already using Amoxyl DT- Turkana, Siaya & Homa Bay- 1 year supply
✓ Local manufacturing
✓ KEMSA in process of Procurement
✓ National Launch – by 1st July 2017. invite KPA
Challenges in Implementation

- Inadequate funding for child health
- Weak commodity management system leading to stock outs
- Inadequate synergy across programmes
- HR and governance challenges at National & County level
Recommendations

• Resource mobilization (domestic and external) for key HI interventions-

• Leveraging of Resources from: Partners including GFF & Global fund

• Equity focused programming- strengthening data availability and use for programming / decision