Pneumonia Treatment

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Timely high quality pneumonia treatment is missing!

Pareto of childhood pneumonia in 50 low/middle income countries¹ (2013)
Total = 109M cases

80% of all untreated cases

See next page for detail

All 50 countries: 109M 81M
Top 11 countries: 86M 67M

Notes: ¹Estimates by John Snow, Inc for the 49 UNICEF Every Woman, Every Child countries + India

*Note: Treatment rates estimated using a combination of the latest DHS, MICS or NFHS data – depending on what was available for each country. In some cases, like India, antibiotic usage may be higher and the size of the “untreated” population may be an overestimate.
WHO Current IMCI & iCCM Clinical guidelines
Pneumonia Standard Case Management (SCM)

- 0-59 months old child with ARI symptoms presents to a health worker
  - Assess, classify, identify treatment, counseling and follow-up
  - Chest indrawing & danger signs*
    - Referral to facility for injectable antibiotic/supportive therapy
  - Fast breathing‡
    - Child <2 months
    - Child 2-59 months
      - Appropriate antibiotic†
  - Cough & Cold
    - Homecare advice

* Unable to drink, convulsions, abnormally sleepy or difficult to awake, stridor in a clam child, or clinically severe malnutrition
† RR ≥60 (infants up to 2 months); ≥50 (infants 2–11 months) & ≥40 (children 12–59 months)
‡ Oral amoxicillin
Treatment Challenges

- Diagnostic ambiguity
- Inappropriate use of tools
- Unavailable tools (CXR)
- Inadequate health worker training

0-59 months old child with ARI symptoms presents to a health worker

Assess, classify, identify treatment, counseling and follow-up

- Chest indrawing & danger signs*
- Fast breathing‡
- Cough & Cold

Referral to facility for injectable antibiotic/supportive therapy

- Child <2 months
- Child 2-59 months

Appropriate antibiotic†

Homecare advice

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- Unavailable abx, poor quality
- No supportive therapy (O2)
- Inadequate health worker training
- Poor quality assurance, oversight
- Inappropriate use of abx
- Abx resistance

* Unable to drink, convulsions, abnormally sleepy or difficult to awake, strider in a clam child, or clinically severe mainutrition

† RR ≥60 (infants up to 2 months); ≥150 (infants 2-11 months) & ≥120 (children 12-59 months)
Accelerated impact & efficiency through integrated implementation

**Environmental**
WASH,* reduce overcrowding and household air pollution

**Nutrition**
Breastfeeding promotion,* preventive vitamin A or zinc supplementation*

**Vaccines**
Measles, *Haemophilus influenzae* type b, pneumococcal infection, rotavirus, cholera

**Treatment**
Oral rehydration solution, continued feeding after diarrhoea, zinc for diarrhoea treatment, probiotic use, antibiotics and oxygen therapy for pneumonia, antibiotics for dysentery

**Increased susceptibility**

**Exposure**

**Pneumonia**

**Diarrhoea**

**Delivery platforms**
Promotion of community-based health and behavioural change

Financial incentives to promote care seeking

Integrated community case management

Facility-based IMCI

**Survival**

**Death**

FROM: Bhutta Z Lancet 2013