

Care givers role in antimicrobial stewardship for the ‘common cold’ - a public health approach utilising the Road to Health Book

Antimicrobial resistance (AMR) is a global issue affecting medical and surgical patient outcomes, and responsible for 700 000 deaths annually.^[1] A major contributor to AMR is the indiscriminate use of antibiotics in acute upper respiratory tract infections (AURTIs).^[1] The age-old question of whether antibiotics should be prescribed to a child with AURTI remains unanswered.

Viral causes are common in paediatric AURTIs, especially since the implementation of the *Pneumococcal* and *Haemophilus influenzae* B vaccines in the Expanded Programme of Immunization (EPI).^[2] Home-made remedies, specifically with honey, have been proven to be convenient, cost-effective and beneficial for symptomatic relief from coughs and sleep difficulties.^[3-5] Antibiotic prescriptions should be provided for specific indications *viz.* clinical features of pneumonia or suppurative tonsillitis,^[3] or delayed use by 48 hours for non-responders. In most settings, antibiotics are prescribed contrary to these guidelines. In a 2020 study in Pietermaritzburg, South Africa (SA), 76% of paediatric AURTIs were treated inappropriately with antibiotics.^[6]

Antimicrobial stewardship programmes address incorrect prescriptions with healthcare professionals. However, there are limited interventions targeting caregivers, who are key in decision-making for the child. Parental knowledge of antibiotic use in AURTIs is poor. A 2014 cross-sectional study on parental attitudes to antibiotic usage showed that 79% of parents believe that antibiotics cure viral infections.^[7] A SA qualitative analysis of patients, parents and guardians revealed that while these parties were largely open to discussions on antibiotics with their providers, long waiting times with brief consultations were limiting factors.^[8]

One avenue of reaching caregivers is through the Road to Health Book (RTHB). In the Western Cape, >95% of parents/guardians found the information in this ‘clinic book’ useful.^[9] Management of common colds, the most common childhood illness, is not featured in the RTHB.

A qualitative study, educating parents on respiratory infections by an interactive booklet resulted in reduced return visits and decreased requests for antibiotics.^[10]

I recommend including information on management of AURTIs in the RTHB. This insert should be interactive, pictorial and avoid medical jargon (Fig 1). It could ask:

What should you do when your child is coughing at home? Information on adequate hydration, tepid sponging for fever,^[3,4] paracetamol for pain and simple linctus solutions formula (e.g. equal parts water and honey)^[5] should be provided.

When should you take your child to the clinic/hospital? Key clinical features that a parent can easily identify including fast/noisy breathing, fever for >48 hours,^[11] persistent cough >48 hours and haemoptysis, should be mentioned.

Does your child need an antibiotic? Tools dispelling myths surrounding the need for routine use of antimicrobial agents and the harms with inappropriate use should be highlighted.

This strategy would alleviate the burden on clinics and ultimately reduce antibiotic usage.

Cheshni Jeena

University of KwaZulu-Natal, Durban, South Africa
cheshnijeena@gmail.com

Prakash Jeena

University of KwaZulu-Natal, Durban, South Africa
jeena@ukzn.ac.za


My child is coughing. What should I do?

Should I go to the clinic?

You **must** go to the clinic if your child:

- Is less than 3 months old
- Is coughing for more than 3 days
- Is coughing up blood

Do not miss any of the scheduled immunizations – even if your child is sick!



If I go to the clinic, will my child receive an antibiotic?



Antibiotics are NOT always necessary and can be harmful if used incorrectly. However, if a bacterial infection is suspected, your child may be given an antibiotic: either a Ceftriaxone injection or Amoxicillin syrup.

If my child does not need to go to the clinic, what can I do at home?

Make sure your child eats well and drinks lots of water. Continue breastfeeding.

For cough/sore throat:

5 teaspoons warm water + 1 teaspoon sugar/honey + 1 teaspoon lemon juice


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For fever: Sponge forehead with warm water and/or give paracetamol syrup

Fig. 1: Sample of proposed insert.

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