NIHR | School for Primary Care Research

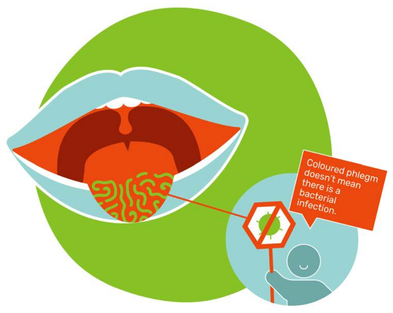
INFOGRAPHICS ABOUT ANTIBIOTICS: MAKING FACTS ACCESSIBLE

INTRODUCTION
Public misconceptions about antibiotic use persist despite the efforts of antibiotic awareness campaigns. These campaigns have often followed a top-down approach and have not sought input from the public. Communities need to see antibiotic campaign messages as relevant, accessible and important in order to have an influence on health seeking behaviour and antibiotic use.

OBJECTIVES
To develop a series of evidenced-based infographics (EBIs) on antibiotic use for common infections in children and to evaluate their effectiveness at increasing parents' understanding of antibiotic use and antibiotic resistance.

METHODS
Three phases to this research.
- Phase 1: to identify and summarise scientific evidence for antibiotic use for three common infections in children (sore throat, acute cough and otitis media)
- Phase 2: to co-design a series of prototype EBIs for each infection in two focus group interviews with parents of young children, and graphic designers
- Phase 3: to test the feasibility of EBIs in increasing parents' understanding about antibiotic use *(*currently in progress)*

1. COUGH

Attempt 01


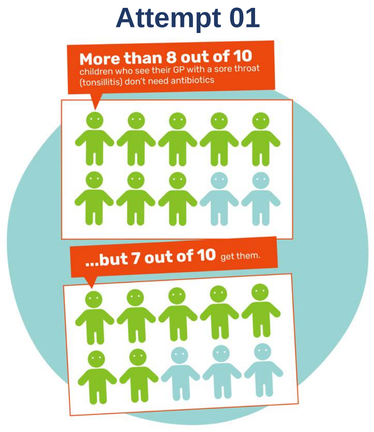
"…It's very clear this is a very common misconception, I think." (Participant 1)

Attempt 02


"It's almost over-complicated. I think you could probably simplify it, make it less anatomically correct." (Participant 3)

FINAL VERSION


2. SORE THROAT

Attempt 01


"Tonsillitis is obviously different from just a plain sore throat […] because my reaction to the whole thing is different if it's the starting point is tonsillitis, versus if it is not." (Participant 2)

Attempt 02


"The only thing I thought was that it looks like the people who actually need the antibiotics, don't get them." (Participant 1)

FINAL VERSION

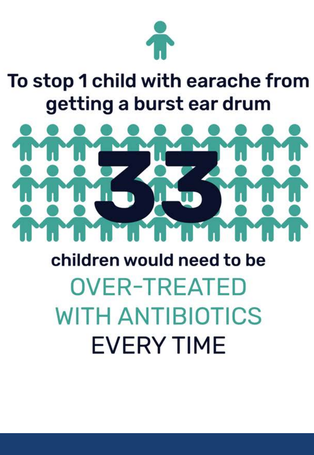

3. EARACHE

Attempt 01


"Funnily enough, it left me thinking oh gosh, 5% do [experience a burst eardrum]." (Participant 2)

Attempt 02


"I'd turn it around. For every one child who needs antibiotics to prevent a burst eardrum, 33 children will get [antibiotics] who don't need them." (Participant 3)

FINAL VERSION


RESULTS
Parents mostly found the evidence displayed in the infographics novel and relevant to their families. However for some parents, the presented evidence was either too medically-focussed where the outcome was not relevant to parents or not of immediate concern to parents. The manner in which the information was displayed influenced their understanding e.g. difficulty interpreting graphs. Superfluous components of the infographic were often questioned. Parents preferred one health message per visual using accurate and consistent terminology to avoid misinterpretation.

IMPLICATIONS
This proof-of-concept study is a work in progress. We have co-developed a series of EBIs with parents and professional graphic designers and identified how parents interpret EBIs on antibiotic use and antibiotic resistance. Phase 3 will evaluate whether EBIs can increase parents' understanding about antibiotic use. If shown to be beneficial, this will inform novel approaches to improving antibiotic stewardship initiatives in the community.

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