Informed Health Choices

Learning resources for vaccinating children against unreliable claims and uninformed choices

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The problem

1. Unreliable health claims
2. Inability to assess claims
3. Uninformed health choices
What do people need to learn?
That's a claim!

Guides for students and teachers to think critically about health claims

Beware of claims

Think 'fair' about the evidence

Take care when you decide

Introduction
What do you do when you burn your finger? Some people say "Cow paw will cure your burn." They say that because when they had a burn, they used cow paw and their burn got better. That was their personal experience. But is it possible that their burn would have got better without cow paw?

There are lots of claims like this about what is good for our health. A claim is something someone says that can be right or wrong.

A treatment is something you do for your health—for example, taking a medicine, exercising, or even putting your finger in cow paw. A treatment effect is something a treatment makes happen—like making you feel better or working, making you stronger, or curing a burn.

People make lots of claims about treatment effects. How can we tell which claims are right or wrong? To do this, you need to look at what supports the claim—evidence. For example, someone's personal experience is not a good basis for a claim about what is good for your health. This is because we don't know what underlying cause of the treatment if that person had done something else.

To know if a treatment (like putting cow paw on a burn) causes an effect (like a burn getting better), the treatment has to be compared to something else (like not putting cow paw on a burn). That way we can see what would happen if people used something else. Researchers compare a treatment given to people or a group to a treatment given to people in another group. These comparisons provide evidence—facts to support a conclusion about whether a claim about treatment effects is right or wrong. For these comparisons to be fair, the only important difference between the groups should be the treatment they receive.

www.thatsasclaim.org
BEWARE
Trust alone
“It worked for me!”
If someone got better after using a treatment it does not necessarily mean that the treatment made them better.

READ MORE

THINK 'FAIR'
Unfair comparison
Dissimilar comparison groups
Look out for treatment comparisons where the comparison groups were not alike.

READ MORE

TAKE CARE
Advantages and disadvantages
Are the advantages better than the disadvantages?
Always ask yourself whether the possible advantages of a treatment are better than the disadvantages of the treatment.

READ MORE
What can we do to help children learn?
Sarah said she once put cow dung on her burn and her burn healed! So she says cow dung heals burns!

Look! There’s some cow dung! Put some on your finger, John!

Ok...
Good afternoon, children. My name is Professor Compare.

Good afternoon, Professor Fair! Nice to meet you!

Good afternoon, Professors! I am Julie.

Good afternoon. I am John.
Professors, was Sarah trying to mislead us?

No, but what she said was wrong. It could be because she was misled by someone else.

Or it could be because she has not learned some important lessons!

Professors, will you teach us?

Yes, John.
How can we measure what they have learned?
Habibah has pain in her ear, and she asks her brother Hassan what to do about it. He says that once, when he had a pain like that, he rinsed his ear with hot water. The next day, his ear pain was gone. Based on his experience, he says rinsing with hot water is helpful for ear pain.
Do you agree with Hassan?

A. Yes, because this is Hassan’s experience, it is likely to be true.

B. No, Hassan’s experience is not enough to be sure.

C. Yes, Hassan rinsed his ear with hot water, and the next day his ear pain was gone.
Effects of the Informed Health Choices primary school intervention on the ability of children in Uganda to assess the reliability of claims about treatment effects: a cluster-randomised controlled trial

Allen Nsangi, Daniel Semakula, Andrew O Osman, Astid Austvoll-Dahlgren, Matt Osman, Sarah Rosenbaum, Angela Mordi, Claire Glinton, Simon Lewis, Margaret Kanyevi, Ian Chidiner, Atdeh Fredheim, Yangong Ding, Nelson K Sewankambo

Summary
Background Claims about what improves or harms our health are ubiquitous. People need to be able to assess the reliability of these claims. We aimed to evaluate an intervention designed to teach primary school children to assess claims about the effects of treatments (ie, any action intended to maintain or improve health).

Methods In this cluster-randomised controlled trial, we included primary schools in the central region of Uganda that taught year-5 children (aged 10–12 years). We excluded international schools, special needs schools for children with auditory and visual impairments, schools that had participated in user-testing and piloting of the resources, infant and nursery schools, adult education schools, and schools that were difficult for us to access in terms of travel time. We randomly allocated a representative sample of eligible schools to either an intervention or control group. Intervention schools received the Informed Health Choices primary school resources (textbooks, exercise books, and a teachers’ guide). Teachers attended a 2 day introductory workshop and gave nine 80 min lessons during one school term. The lessons addressed 12 concepts essential to assessing claims about treatment effects and making informed health choices. We did not intervene in the control schools. The primary outcome, measured at the end of the school term, was the mean score on a test with two multiple-choice questions for each of the 12 concepts and the proportion of children with passing scores on the same test. This trial is registered with the Pan African Clinical Trial Registry, number PACTR20160601679337.
≈ 2000 eligible schools

170 randomly selected

120 consented and randomised

60 intervention schools  60 control schools
≈ 6400 children       ≈ 6300 children
<table>
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<th>Control schools</th>
<th>Intervention schools</th>
<th>Adjusted difference</th>
<th>Odds ratio</th>
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<tr>
<td></td>
<td>N schools = 60</td>
<td>N children = 4430</td>
<td>N schools = 60</td>
<td>N children = 5753</td>
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<td>Primary outcome</td>
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<tr>
<td>Average score</td>
<td>43%</td>
<td>62%</td>
<td><strong>20%</strong></td>
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<td>(95% CI 17% to 23%)</td>
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<td>P &lt; 0.00001</td>
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<td>Passed</td>
<td>27 children per 100</td>
<td>69 children per 100</td>
<td><strong>50 more children per 100</strong></td>
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<td>(95% CI 44 to 55 more)</td>
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<td>P &lt; 0.00001</td>
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<td>Mastery</td>
<td>1 child per 100</td>
<td>19 children per 100</td>
<td><strong>18 more children per 100</strong></td>
<td>35</td>
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<td>(95% CI 18 to 18 more)</td>
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“[This is about] things we might actually use instead of things we might use when we are all grown up. And by then we’ll forget.”

Child participant in development of primary school resources, Norway