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The UK's Deputy Chief Medical Officer has urged his own mother to take the Covid-19 vaccine when it's released. Facundo Arrizabalaga

# COVID-19 vaccine: how the 'mum test' can help ensure take-up

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One of the many lessons of the pandemic concerns the importance of communication: how the authorities frame a message can be as influential as the content of the message itself.

In the earliest stage of the pandemic, for instance, we were taught to wash our hands for 20 seconds. That advice became more memorable, or “sticky” in the language of marketers, when it was framed as singing “Happy Birthday” twice.

The authorities are still keeping framing in mind. The UK's deputy chief medical officer, Jonathan Van Tam, recently took a human approach to reassuring that all

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due checks will be applied before any coronavirus vaccine is approved. Asked whether he'd be among the first to take the vaccine, he said he would but he isn't among the most high-risk in society.

He then invoked "the mum test", stressing that he'd want his own, elderly mother to have the vaccine: "I've already said to her, 'Mum, make sure when you're called you're ready, be ready to take this up, this is really important for you because of your age.'"

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Vaccination is an issue that is emotive, politically charged, psychologically complex and has been beset by an infamous case of scientific fraud. At a time when people are afraid and fake news abounds, it is vital that the authorities get their communication just right.

### **The science of the 'mum test'**

Van Tam's statement is interesting. There were many approaches that could have been taken in an attempt to reassure us. Scientists often fall back on statistics at such times. But, not everyone understands basic statistics. When researchers asked a representative sample of the US population to convert 20 out of 100 to a percentage, 28% failed to do so accurately.

Even those who are capable of understanding statistics may not invest the effort necessary to see beyond their own prejudices. When a group of volunteers were asked questions about data purportedly from tests of a skincare product, their statistical reasoning was substantially better than when the same data was presented as from a gun-control study. When it came to gun control, people were more likely to interpret objective statistics as aligning with their pre-existing beliefs.

Perhaps it is unsurprising then that alcohol education research has found that statistics are more persuasive than anecdotes when preaching to the converted, but the reverse is the case when speaking to sceptics. When it comes to the important business of changing minds, anecdotes trumps statistics.



A vaccine is coming - soon. VP Brothers/Shutterstock

Van Tam went for a personal message, but not too personal – he could have said: “I will take the vaccine.” Was it the right thing to do in this case?

A series of experiments have shown that many doctors recommend procedures to their patients that they would not choose for themselves. The differences are striking.

One research group asked US physicians which of two treatments – one with a slightly higher death rate but fewer side effects and another with lower death rates but more side effects – they would endorse to treat an avian flu virus. The results showed 63% chose the treatment with the higher death rate for themselves, but 49% recommended this for patients. So it seems physicians were more willing to accept a given risk of death in order to avoid other adverse effects of a treatment when they were making a decision for themselves than when recommending a course of action to others.

What’s more, science shows that we tend to make less biased decisions if we are making them on behalf of someone else. By making his own mother the litmus test, Van Tam nailed it. Not only will the mention of the word “mum” have evoked positive neurological responses in listeners. His story also gave his audience a sticky and meaningful representation of just how safe this vaccine must be before being scaled up for release.

## **Wider lessons**

Despite being an expert on behavioural science, I did not know that the mum test existed until I heard news reports about Van Tam’s speech. I quickly realised there is a lot of research to back it up.

I will even use it myself when negotiating. When we’re buying something, we’re often reliant for information on the very person who has most to gain by selling to us. The mum test offers a useful

strategy for overcoming this conflict of interest.

A clever experimental approach reveals that people are much more willing to report a truth that they know to be misleading than they are to tell an outright lie. So, a salesperson might feel quite comfortable giving an affirmative answer to the question “is this product worth the extra £200?”, because it is true that the product is worth the extra money to a very niche group of buyers who require a specific feature. But the same salesperson might balk at giving an affirmative answer to the question “is this the product you would recommend to your mother?”

It is great to see that the government is on the right track to ensuring that people take up the COVID-19 vaccine when it comes. Van Tam’s human approach to communication is a welcome sign that evidence-based behavioural insights are being successfully applied to coronavirus.

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