

Does the quality of the evidence base affect people's trust and choices?

Yes!

Drug A and Drug B are designed to cure the common cold. Research has shown that they are effective in:

Drug A 70/100 people

Quality of Evidence
Moderate

Drug B 60/100 people

Quality of Evidence
High

Very high quality: The authors have a lot of confidence that the true effect is similar to the estimated effect.

High quality: The authors believe that the true effect is probably close to the estimated effect.

Moderate quality: The true effect might be markedly different from the estimated effect.

Low quality: The true effect is probably markedly different from the estimated effect.

In our studies people did not simply pick the drug with the highest effectiveness, but traded effectiveness off with the quality of the evidence. In this example people tended to choose Drug B, (lower efficacy but based on higher quality evidence).

So how much do people *value* evidence quality?

Drugs A to D:

Quality of the Evidence



Quality of the Evidence



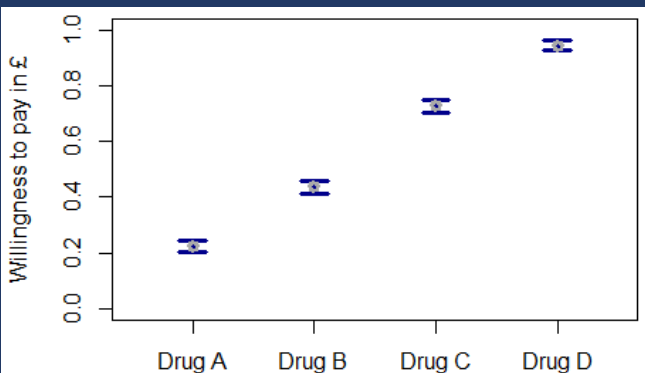
Quality of the Evidence



Quality of the Evidence



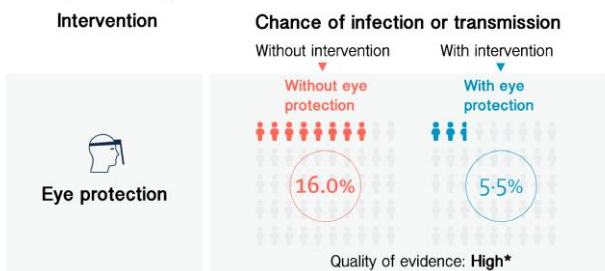
We gave people details of 4 drugs with the same effectiveness but different levels of evidence quality and asked how much they would be willing to pay for each, on a scale from £0 to £1.



People seem to treat quality on a linear scale: they value each increment increase in evidence quality about the same.

We also investigated effects on **trust** when communicating the quality of evidence.

What protects against COVID-19 infection or transmission?



* High quality: we are very confident that the true effect lies close to that of the estimate of the effect.
Low quality: our confidence in the effect estimate is limited; the true effect could be substantially different from the estimate of the effect.

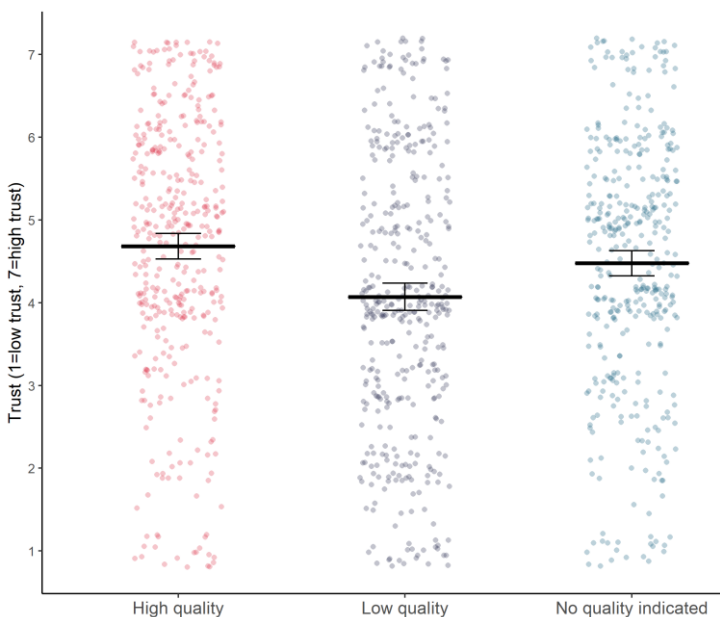
People were shown one of three pictures. Each showed information on the effectiveness of eye protection, but differed on the quality of evidence information that was given:

Quality was said to be **high**, **low**, or **no** quality indication was shown.

We then asked people how much they trusted the information on the effectiveness of eye protection.

People trusted the information less if it was based on low compared to **high** quality evidence.

BUT: when **not shown a quality indicator** they trusted the information about as much as people who were told it was based on **high** quality evidence.



Read more about our experiments!



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