

A delay in acceptance or refusal of vaccines despite availability of vaccination services.

It is complex and context specific varying across time, place and vaccines.

It includes factors such as :

- Complacency → Lack of perceived need/value for vaccine
- Convenience → Access to the vaccine
- Confidence → Level of trust in vaccine, provider or process



# What is the state of vaccine confidence in the world?

Surveyed >284,000 individuals in 149 countries (2015-2019)

Respondents who strongly agree (%)

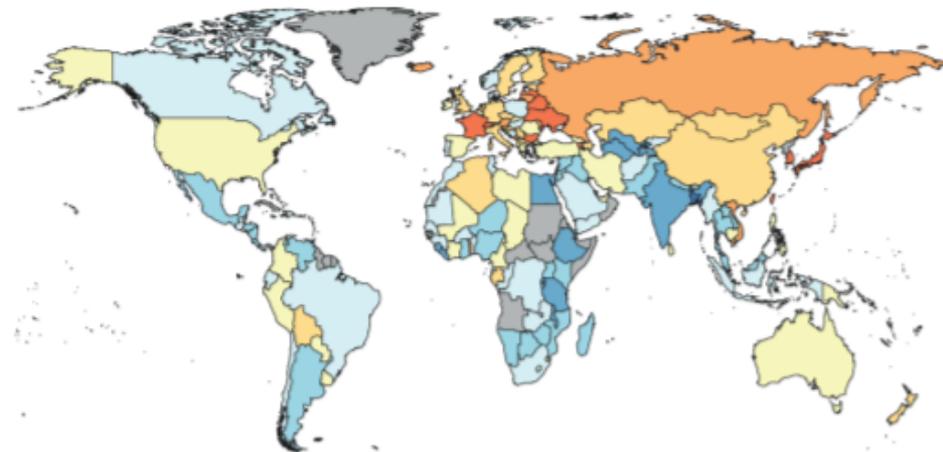
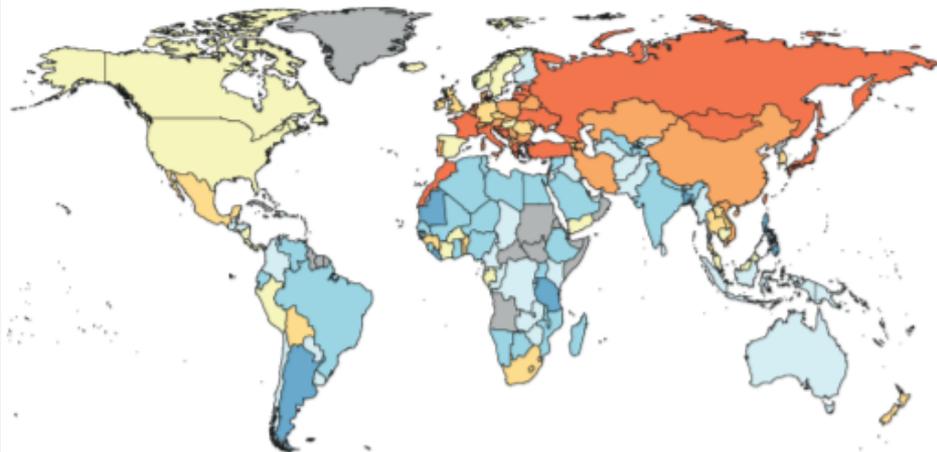
0-29.9 30-39.9 40-49.9 50-59.9 60-69.9 70-79.9 80-89.9 90-99.9

November, 2015

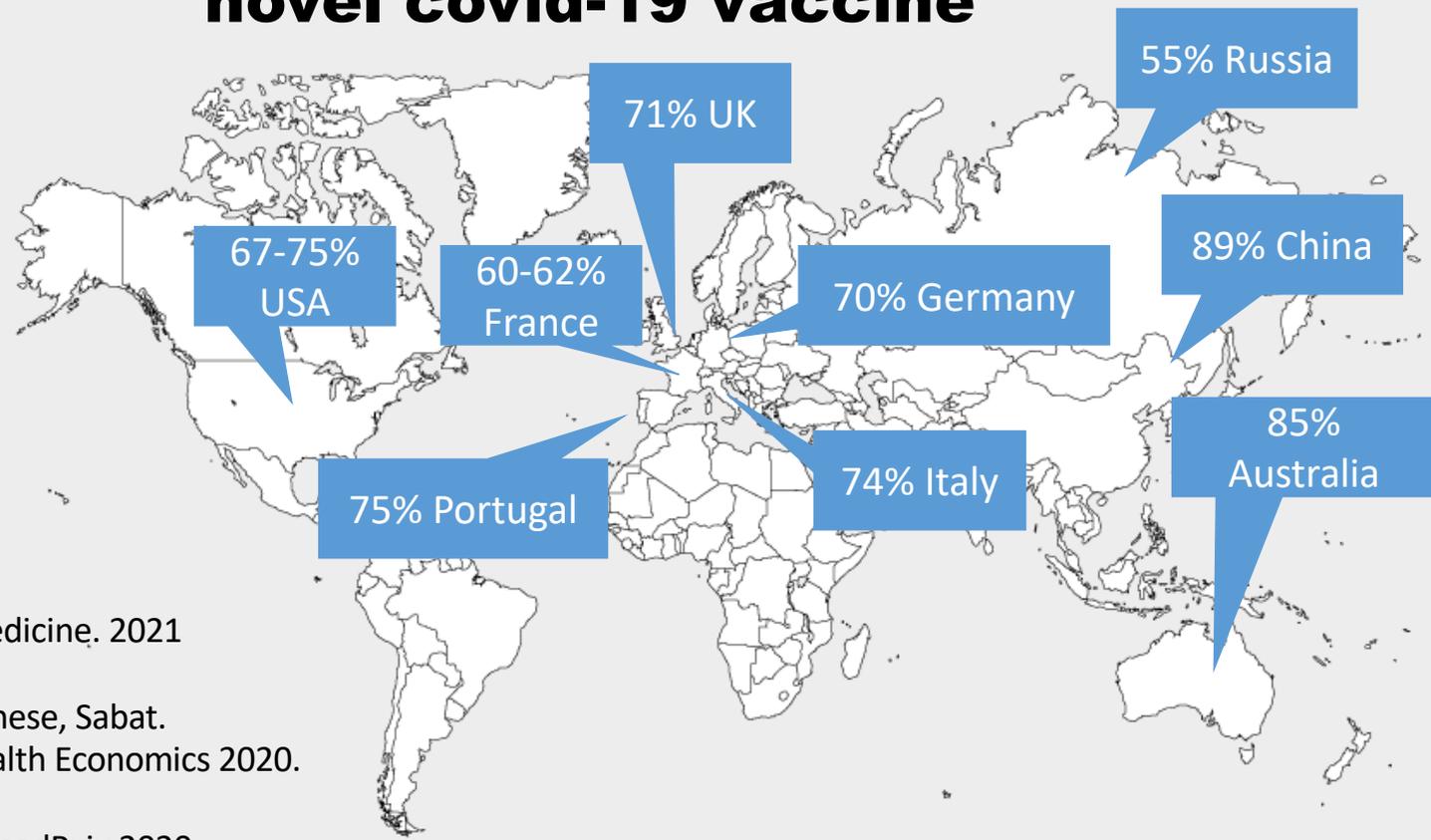
November, 2018

A Vaccines are safe

B Vaccines are safe



# Proportion of study participants that would accept novel covid-19 vaccine



Lazarus et al. Nature Medicine. 2021

Neumann-Böhme, Varghese, Sabat.  
European Journal of Health Economics 2020.

Malik, Elharake, Omer, medRxiv 2020.

Dodd, R.H., et al., Lancet Infect Dis, 569 2020.

# If a new coronavirus (COVID-19) vaccine became available would you accept the vaccine?

## 90% responded yes.

Main reasons for accepting the vaccine:

- To protect self, others, family
- To stay safe for children
- To stop need for social distancing

Main reasons for not accepting the vaccine:

- Concerns about safety
- New vaccine
- Process rushed
- Not enough evidence
- Not in an at risk group
- Concerns about lack of effectiveness



Black, Asian, Chinese, Mixed or Other ethnicity respondents were almost **3x likely** to reject a vaccine for themselves and their children than White British, White Irish and White Other respondents

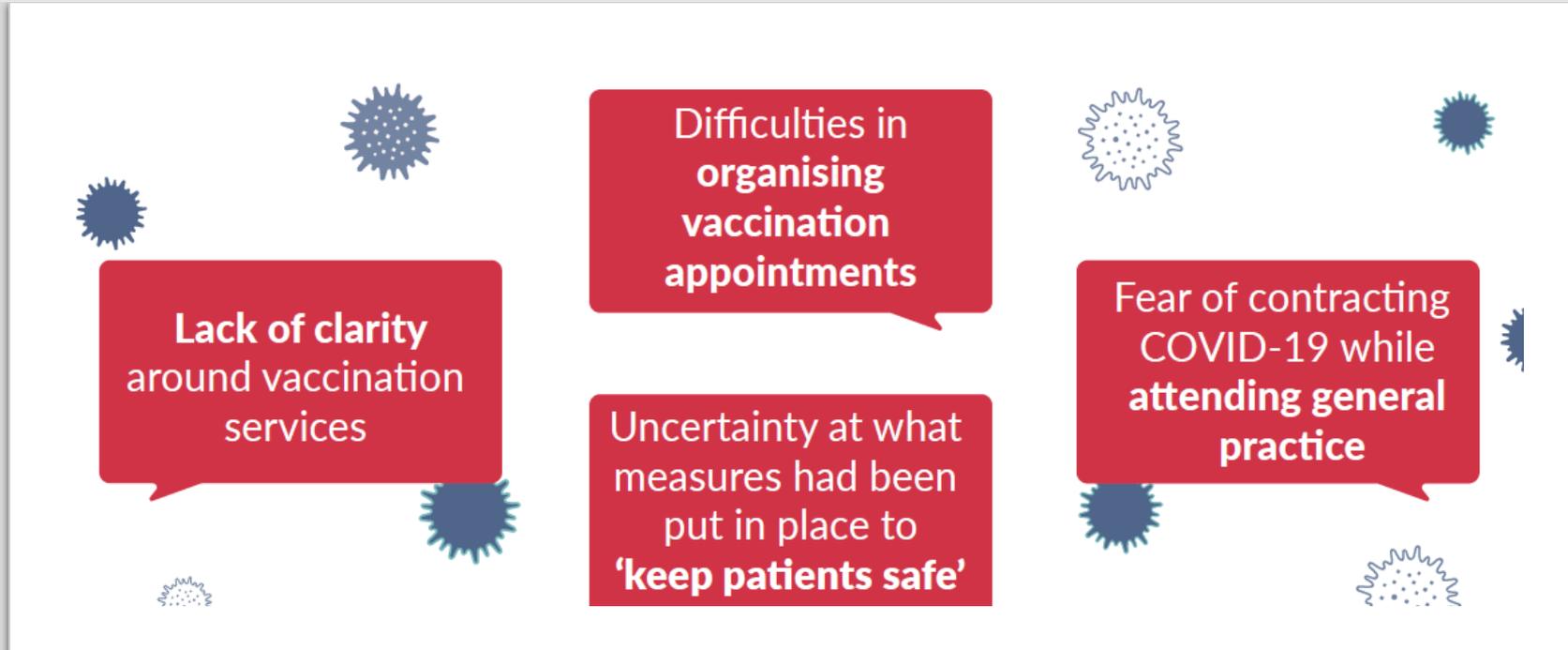
**Lower income households were also more likely to reject a COVID-19 vaccine**



N= 1,252 parents, UK, April-May 2020

# Parents' and guardians' views and experiences of accessing routine childhood vaccinations in England

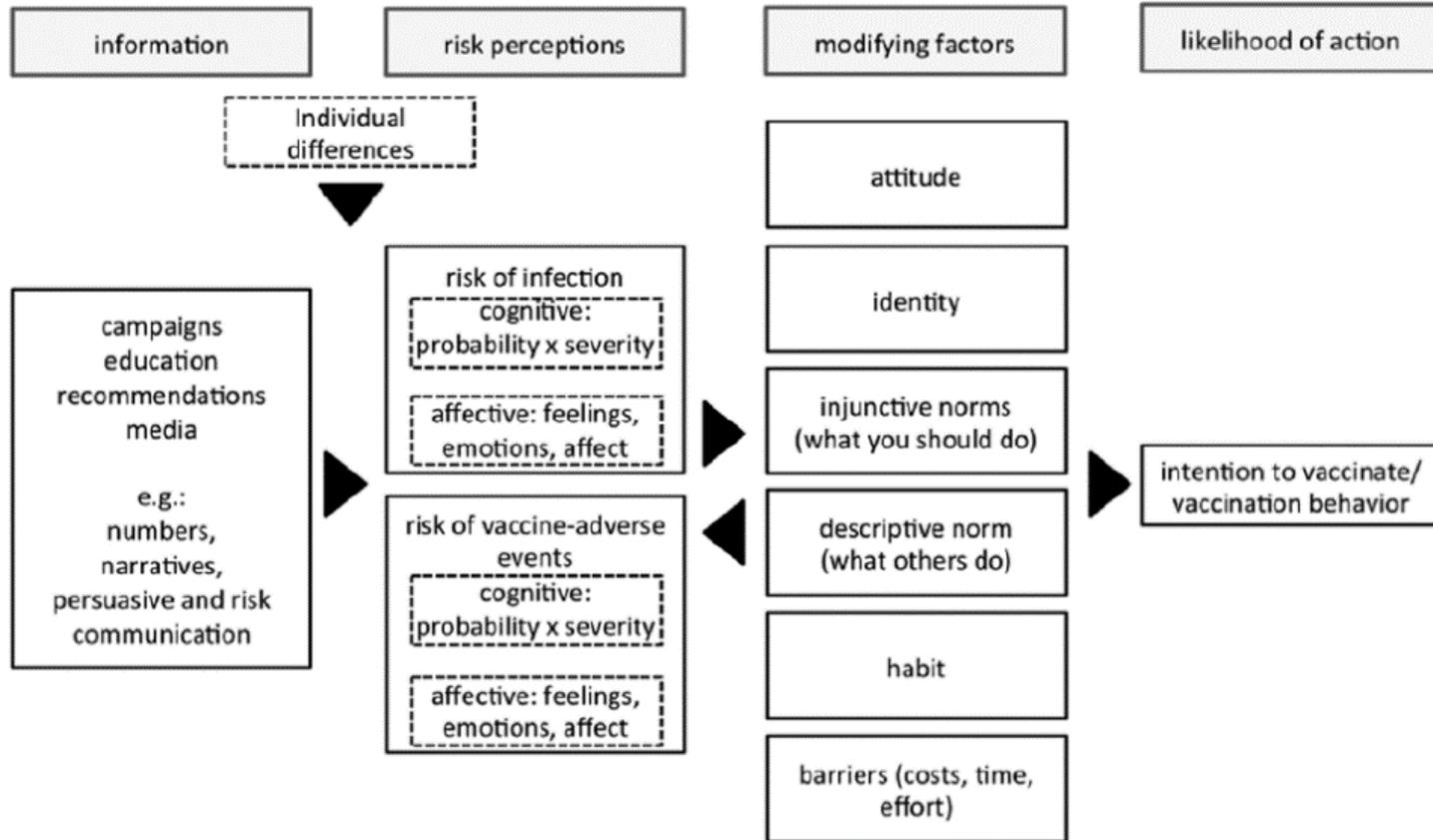
Almost 1 in 4 had experienced issues or difficulties



Bell S, Clarke R, Paterson P, Mounier-Jack S (2020) Parents' and guardians' views and experiences of accessing routine childhood vaccinations during the coronavirus (COVID-19) pandemic: A mixed methods study in England. PLoS ONE 15(12): e0244049.

<https://doi.org/10.1371/journal.pone.0244049>

# Determinants of vaccine decision making



Betsch et al. (2015) Using Behavioral Insights to Increase Vaccination Policy Effectiveness. Policy Insights from the Behavioral and Brain Science.

# The audience of today... and tomorrow



- More **informed and empowered** individuals than ever before, however... exposure to misinformation, conflicting information, information overload
- With social media and the Internet **concerns** can spread quickly and far
- Online misinformation around COVID-19 vaccine has been shown to influence peoples intentions on vaccinating

Loomba et al. 2020. Measuring the Impact of Exposure to COVID-19 Vaccine Misinformation on Vaccine Intent in the UK and US. MedRxiv.



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Coronavirus outbreak

## Battling coronavirus misinformation in the age of social media

Myths and falsehoods spreading quicker than officials can provide updates

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### Coronavirus: WHO chief warns against 'trolls and conspiracy theories'

But not only has the virus spread, so too has misinformation.

Numerous conspiracies have appeared since the outbreak - not to mention dubious health advice.

As the death toll from the coronavirus outbreak continues to rise, social-media users have been sharing advice on ways to treat or prevent the disease.

But at least some of the tips have proved to be misleading or false.

One such claim - **shared 16,000 times on Facebook** - advises users in the Philippines to "keep your throat moist", avoid spicy food and "load up on vitamin C" in order to prevent the disease.

Another unsubstantiated claim shared online suggests avoiding cold or preserved food and drinks, such as ice cream and milkshakes, for "at least 90 days".



▲ Patients in an isolated intensive care unit in Wuhan, Hubei province. Authorities appear to be ramping up a campaign of punishing local officials for the epidemic. Photograph: AP

WHO  
Myth  
busters

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters>

No. There is no evidence that regularly rinsing the nose with saline has protected people from infection with the new coronavirus.

There is some limited evidence that regularly rinsing the nose with saline can help people recover more quickly from the common cold. However, regularly rinsing the nose has not been shown to prevent respiratory infections.



#2019nCoV

Can regularly rinsing your nose with saline help prevent infection with the new coronavirus?

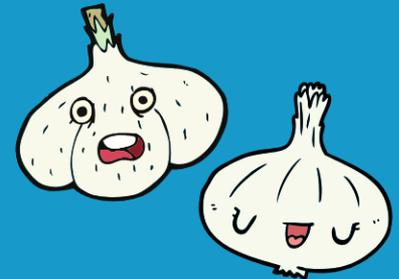


Garlic is a healthy food that may have some antimicrobial properties. However, there is no evidence from the current outbreak that eating garlic has protected people from the new coronavirus (2019-nCoV)



#2019nCoV

Can eating garlic help prevent infection with the new coronavirus?



## Addressing misconceptions on measles vaccination



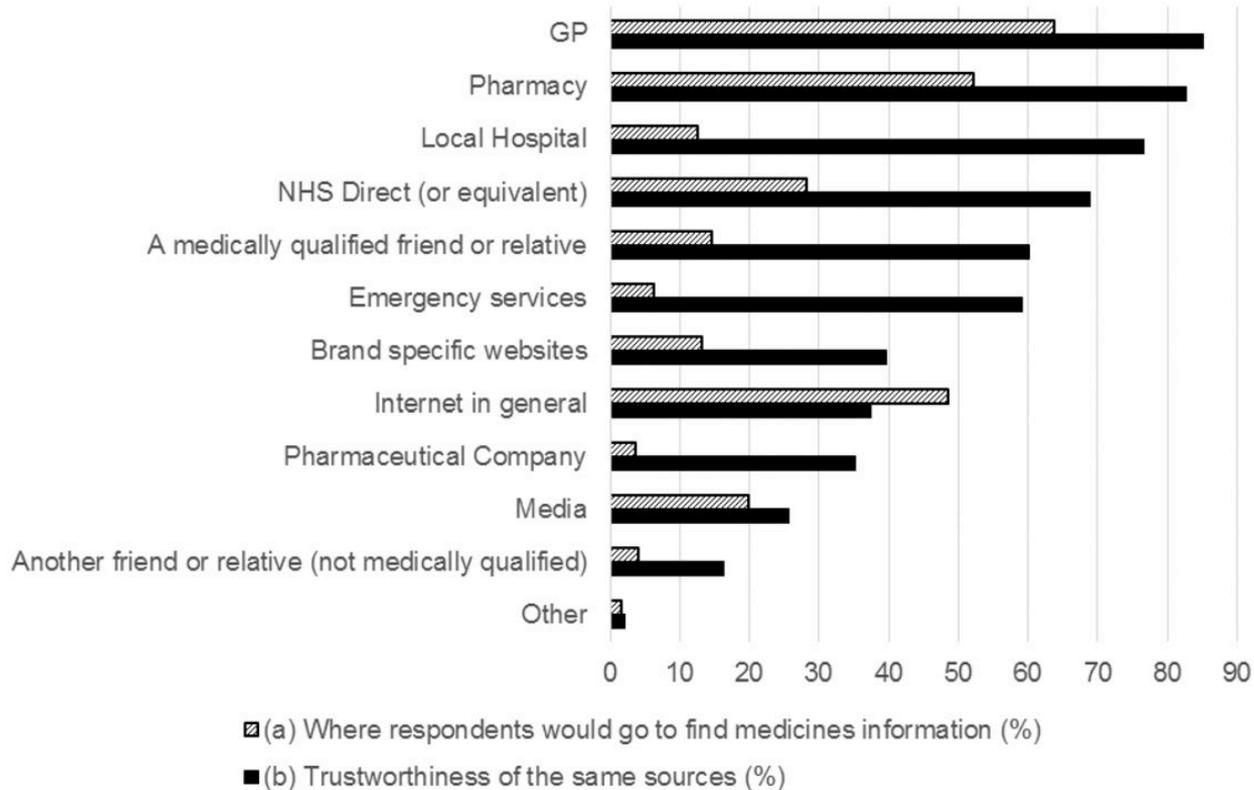
Since the introduction of vaccination, myths and misconceptions regarding vaccination have been present. Scientific research in psychology has shown that addressing these misconceptions is difficult: mere reading about a myth, even about a myth's refutation, can strengthen the myth, rather than weaken its influence. Likewise, an explicit and strong negation of a risk can paradoxically increase rather than decrease the perception of risk in readers.

The steps outlined below, proposed in the scientific literature, aim to help public health professionals address vaccination misconceptions in the best possible way.

- **Core facts:** a refutation should always emphasize the facts, not the myth. The introduction should only present key facts easy to memorize.
- **Explicit warnings:** before any mention of a myth, text, visual or oral cues should clearly warn that the upcoming information is false.
- **Alternative explanation:** any knowledge gaps left by addressing misconceptions linked to vaccination should be filled by providing an alternative casual explanation for why the myth is false.
- **Graphics:** core facts should be displayed graphically when possible.
- **Careful language:** moderate language and formulations should always be used when saying that there is no risk as strong negations of risk may backfire and lead to a higher risk perception.

# Who do people turn to?

5,648 respondents from France, GB, Germany, the Netherlands, Spain and Sweden



Bouder et al. (2015) Transparency in Europe: A Quantitative Study. *Risk Analysis*.



# Addressing vaccine hesitancy

- Healthcare providers remain the **most trusted** advisor and influencer of vaccination decisions
- People are **more likely to vaccinate if a healthcare provider recommends** to vaccinate
- **Vaccinated healthcare providers** are **more likely to recommend** vaccination to others
- In addressing vaccine hesitancy in their patients, the **capacity and confidence** of healthcare providers are **stretched**

With a new vaccine it will be essential for government, public health officials and health care workers to...

- Reassure public with transparency, accountability and timeliness
- Listen and engage with stakeholders and the public
- Acknowledge and address concerns when they arise

**Thank you**

Dr Pauline Paterson

[www.vaccineconfidence.org](http://www.vaccineconfidence.org)

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