



### So Much Misinformation, So Little Time! 2/10

- I was once skeptical with this vaccine as well! EVEN as a **Public Health Pediatrician!**
- With **any** new approved vaccine or medication, **misinformation & conspiracies** follow!
- Remember, **misinformation** travels **FASTER** than **actual facts**. I learn a new conspiracy theory every day!
- Unfortunately, antivaxxers want to scare you from getting the vaccine, so please only get your HEALTH info from **HEALTH experts** :)
- To make things simpler, I will talk about **mRNA** vaccines including Moderna & Pfizer's vaccine (that received FDA EUA last Friday)!
- While **experts** think the **pros FAR outweigh the cons**, it's of course **your choice** (with everything you take :)! But personally, I would **highly recommend it!**
- **SWIPE for the TOP 8 MYTHS!** @dr.risahoshino

### Myth #1: The Vaccine Causes Infertility 3/10

- This is **NOT true**. Someone claimed that because the COVID virus has a **very short** amino acid sequence (building blocks of protein) that closely resembles that of a protein found in the placenta, that **SOMEHOW** the immune system will attack BOTH.
- Sounds like a reasonable argument at first but this sequence is **SO incredibly short** that there is no plausible way that this could EVER happen biologically!
- If this myth were true, wouldn't you see more early COVID-related early pregnancy loss? So far this is **not the case**.
- **Catching COVID** on the other hand is a **HIGH RISK event** for a pregnant mom and **can hurt mom and baby** in many other ways. So getting the vaccine BEFORE you get pregnant to prevent COVID would actually be **beneficial** for you and your baby (ofc, please talk to your OB).

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### Myth #2: But people have DIED from the COVID Vaccine...

- NOTHING can be further from the truth
- I've reviewed the FDA & Pfizer documents (100+ pages) and have attended all the VRBPAC & ACIP meetings (all 30+ hrs of them) regarding the Pfizer vaccine and I can CONFIDENTLY say that **no one died from the COVID vaccine OR ANY APPROVED VACCINE**
- 4 people died in the PLACEBO group and 2 people died in the Vaccine group from their chronic conditions like **heart disease & stroke**. NOT related to the vaccines.
- Unfortunately, people pass away from other causes & a vaccine trial CANNOT stop that from happening!

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### Myth #3: mRNA alters your DNA

- There is absolutely **NO WAY** this can happen. Period.
- Remember Bio class? **DNA** lives in the **NUCLEUS** of your cells, which has a **double layer of protection**.
- **mRNA CANNOT enter your nucleus**—it stays in the CYTOPLASM, which surrounds the nucleus.
- Don't listen to anyone who tries to convince you there are other ways this can happen through "other mechanisms". They may throw a lot of long names at you. They need to take Cell Bio again.

### Myth #4: The Vaccine Causes Bell's Palsy

- Bell's Palsy is a **TEMPORARY** paralysis of one side of the face, which is unpleasant but treatable.
- Since there were 4 cases of Bell's Palsy in the vaccine group vs 0 in the placebo group (out of >43K ppl), people are claiming that the vaccine is causing Bell's Palsy
- The above frequency is **EVEN LESS** than expected in the general population, thus **no causal relationship** can be concluded (although it will be closely monitored ofc).
- Even if the vaccine did cause it, I would personally rather get something temporary & treatable than life-threatening COVID. **Pros vs cons.** @dr.risahoshino

### Myth #5: If I had COVID already or if I'm healthy, I don't need the vaccine!

- Not true!! Those who've had a **prior COVID** infection need the vaccine too!
- This is because NATURAL infection gives VARIABLE immunity, and in fact, there have been cases of **REINFECTION** among those who already got sick with COVID in the past
- It's been shown that the **vaccine induces a better IMMUNE response** than a natural infection
- A PRIOR history of COVID is **NOT a contraindication** for getting the vaccine, especially if you are a high-risk individual. ACIP has some rules on how soon you can get the vaccine (in Caption)
- **"Healthy" people need to get it too!** Thousands of "young & healthy" people have **died from COVID**. NO ONE is safe. Also, **40-45%** of COVID spreaders are **ASYMPTOMATIC** carriers--the science suggests that this vaccine will greatly **LESSEN** the spread from these people (ofc awaiting next year's transmission data for confirmation).

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### Myth #6: The COVID vaccine causes COVID & Autism

- The COVID vaccine **CANNOT cause COVID**. There is NO biological way this can happen, EVER. For the mRNA vaccine, it's **not even the whole virus**, it's ONLY the spike protein which doesn't cause disease, so there is **no way** it can cause disease biologically.
- In fact, no current vaccine can cause actual illness because the viral components inside the vaccine are **too weak** to ever do this. **It's just IMPOSSIBLE.**
- **NO VACCINE has EVER caused autism ever.** One falsified "study" claimed that vaccines cause autism, and it's been a rumor ever since. Don't listen to anyone who says vaccines cause autism. They just want to scare you. @dr.risahoshino

### Myth #7: The COVID vaccine causes "Antibody-Dependent Enhancement" & Autoimmune disease

- BIG NOPE! Antibody Dependent Enhancement is a very uncommon phenomenon where antibodies actually make the disease worse (i.e. in Dengue), however this **does not happen for COVID!**
- If this happened to COVID, we would have known by now as we have given **convalescent plasma** (COVID antibodies) to sick patients **all the time.**
- As for Autoimmune Diseases: Modern & current vaccines are **NOT** associated with autoimmune diseases in multiple epidemiological studies
- In fact, **COVID & other VIRUSES** has been shown to **cause autoimmune disease** (such as Type 1 Diabetes) and **make them worse**, so getting the vaccine would actually **PROTECT** you from autoimmune disease! @dr.risahoshino

### Myth #8: The UK allergy incidents mean the vaccine is UNSAFE (Part 1)

- 2 UK HCWs experienced anaphylactoid reactions (they had their own epipens), which resolved with treatment
- The UK declared that people with severe allergies (requiring carrying epipen) avoid getting the vaccine until further investigation
- Vaccines **RARELY** cause severe allergic reactions (**1 in 1.4M doses**)! **But with any drug or vaccine, it's not impossible.**
- Pfizer **ONLY** excluded ppl with allergies to **PREVIOUS VACCINES** or any component of this vaccine. **They did NOT exclude allergic people from their study.**
- As per the ACIP meeting, Pfizer's study had **6K people** in each group with an **allergy history**--there were **NO differences in allergic reactions** between the two groups.
- As of 12/12 in the US, **ACIP** recommends that people with a history of allergy to a **PREVIOUS VACCINE** or **INJECTABLE** therapy avoid the vaccine. Those with allergy history (of other things) should be **OBSERVED** at a med facility for 30 min but **SHOULD get the vaccine.**
- Even if you were one of the very **RARE** cases of allergic reaction, you can get treated quickly (unlike for covid, where there is no good treatment). Just weighing **pros vs cons!** @dr.risahoshino

### Myth #8: The UK allergy incidents mean the vaccine is UNSAFE (Part 2)

- There have been **NO SEVERE ADVERSE EVENTS** associated with this vaccine or with any modern & current vaccine.
- As more people get the covid vaccine, we will continue to see some rarer side effects reveal themselves, which may be unpleasant. **Don't be alarmed** if you hear about these in the media! Because of the sheer **RARITY** of these cases, the **PROS** continue to **FAR outweigh** the cons.
- **No vaccine or drug** (or anything in life) **is completely risk-free**--but experts believe the **RELATIVE safety of this vaccine is OUTSTANDING.** I agree with these experts.
- FYI it's **COMMON** to get **unpleasant side effects** with this vaccine like **fever, body aches, headache**, ESPECIALLY after the second dose, usually lasting 24-48 hrs. This is **NORMAL** and means you're making **ANTIBODIES.**
- Remember, **COVID is MUCH more likely to cause SERIOUS COMPLICATIONS** that are **much, much worse** than ANY side effect the vaccine will give you (which is treatable unlike COVID).
- Personally, I'm **much more afraid of COVID** than any vaccine!

Please **SHARE & SAVE** if you stand with **SCIENCE!**

- COVID references/resources in Link in Bio!

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