

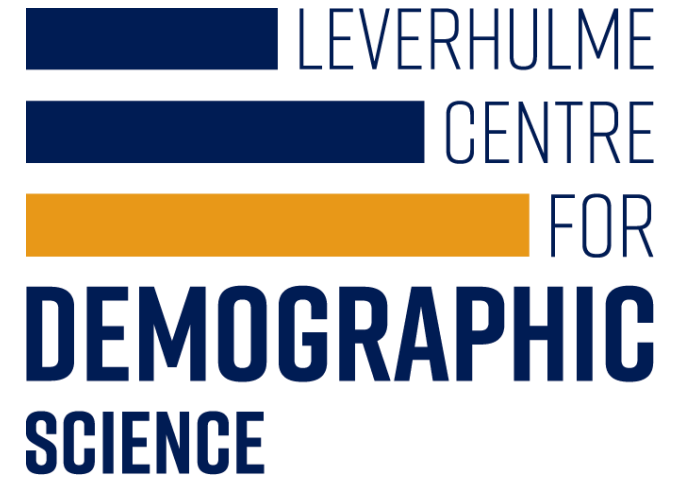
Those Nerdy Girls: Becoming Trusted Messengers in a Crisis

Jennifer Beam Dowd, PhD

Professor of Demography & Population Health

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“AN INFODEMIC IS AN OVERABUNDANCE OF INFORMATION – SOME ACCURATE AND SOME NOT – OCCURRING DURING AN EPIDEMIC. IT MAKES IT HARD FOR PEOPLE TO FIND TRUSTWORTHY SOURCES AND RELIABLE GUIDANCE WHEN THEY NEED IT” –WORLD HEALTH ORGANIZATION

“The best way to fight misinformation is to swamp the landscape with accurate information that is easy to digest, engaging and easy to share on mobile devices. It should also answer people’s questions and, ultimately, fears.”

- Claire Wardle, disinformation expert
in an April 22, 2020 tweet

How it started

March 5, 2020

What I think about COVID-19 this morning ➤



Malia Jones <maliajones@gmail.com>

Thu, Mar 5, 2020, 9:40 AM



to me, bcc: Noah, bcc: Jenna, bcc: Jack, bcc: Paul, bcc: Helen, bcc: Amani, bcc: Amy, bcc: Abbey, bcc: Kate, bcc: JennaW, bc ▾

Hi all!

Maybe I'm the closest thing you personally know to an infectious disease epidemiologist. Maybe not--I'm not an expert on this virus by any stretch, but I have general knowledge and training that is applicable, so here are my thoughts.

First and foremost: we are going to see a tremendous increase in the number of US cases of COVID-19 in the next week. This is not because of some new pattern in the spread of the disease, but rather due to a major change in the requirements to be tested. Until yesterday, if you had flulike illness but had *not* recently traveled to China, Italy, South Korea, or Iran, you could not be tested. This is just the way healthcare works, you get tested if you meet the case definition and the case definition included travel.

As of yesterday, you can be tested if you are sick and have a doctor's order to be tested. So expect things to feel a lot more panicky all of a sudden. We will see hundreds or thousands of new cases as a result of testing increases.

Second: is that panic legitimate? Sort of. This is not the zombie apocalypse. The 3% death rate is probably a wild overestimate. (The denominator is almost certainly wrong because it is confirmed cases--and we only confirm cases when we test for them). That said, even at .03% this would be a big deal. A very big deal. By way of comparison, the death rate for influenza is about 0.01%. So, yeah. Something like 30x worse than a huge global flu pandemic? That's a problem.

Dear Pandemic/Those Nerdy Girls



COVID Questions?
Get answers from the
Nerdy Girls at Dear Pandemic.



Dear Pandemic:

An interdisciplinary team of scientists, delivering data through trusting relationships to improve public health.



It's a Pandemic. You need answers.

Welcome to Dear Pandemic, a website where bona fide nerdy girls post real info on COVID-19. We are committed to facts.

Search our posts...



MOST RECENT POSTS



Is COVID-19 becoming less deadly?

[READ MORE...](#)



Your Burning Questions

When will we get to herd immunity?
SEPTEMBER 24, 2020

Is COVID-19 becoming less deadly?
SEPTEMBER 28, 2020



Who We Are

We are an interdisciplinary all-female team of researchers and clinicians with expertise including nursing, mental health, demography, health policy/economics, and epidemiology.

Our mission is to educate and empower individuals to successfully navigate the COVID-19 information overwhelm. We provide credible, curated, and timely information about the pandemic.

[Read our bios.](#)



From the Community

Love the content. Love the tone. You are role modelling how to converse in a sane and respectful way about over-charged info. LOVE you! Keep it up.
— Adair from Seattle

Another great communication from Nerdy Girls. I'm not that future generation but rather the older generation that feels so hopeful because of people like you.
— Gloria from Dallas

Dear Pandemic Aims

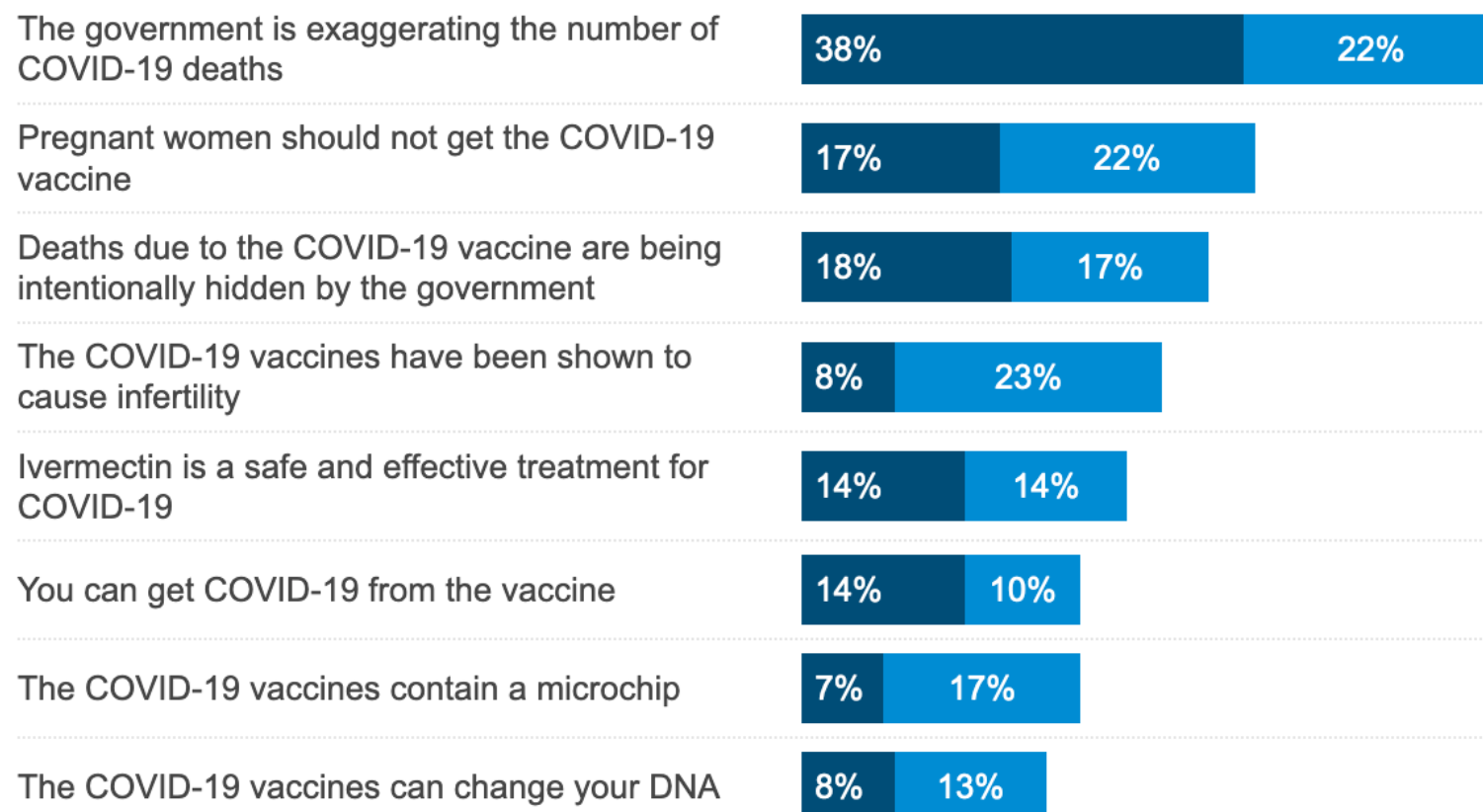
1. To disseminate trustworthy, comprehensive, and timely scientific content about the pandemic to lay audiences.
2. To promote media and science literacy and “information hygiene” practices, equipping our readers to better manage the COVID-19 infodemic within their own networks.

Figure 1

Nearly Eight In Ten Believe Or Are Unsure About At Least One Common Falsehood About COVID-19 Or The Vaccine

Have you heard anyone say or have you read anywhere that...? IF YES: To the best of your knowledge is that true or false, or do you not know whether it is true or false?

■ Have heard, believe to be true ■ Have heard, don't know if true ■ NET





Dear Pandemic:

JULY 17, 2020

What is the real death toll due to COVID-19? Are we OVER or UNDER counting deaths? Wouldn't a lot of these people have died anyway?

DATA AND METRICS



Jennifer Beam Dowd, PhD

A: The death toll has been HIGH (specifics below),

-We are likely UNDER counting deaths due to COVID-19.

-While some deaths attributed to COVID-19 would have occurred during this period anyway, we can calculate “EXCESS MORTALITY” – the number of deaths above and beyond those that would have been expected based on previous years.

@DearPandemic: Meet the women answering burning questions big and small about COVID-19

Should I still be washing all my groceries? What's actually in each type of vaccine? If you need to know, the scientists, clinicians, and scholars of Dear Pandemic have you covered.

BY JILLIAN KRAMER



PUBLISHED MARCH 10, 2021 • 10 MIN READ

Discovery and Innovation



Aparna Kumar now crew explains effective hand-washing to kids, using glitter glue and glitter as a stand-in for germs.

Science With a Side of Fun

The women of Dear Pandemic bring facts and humor to fight misinformation on social media. By Janine White

THILEY PLUMER. When the concept of fecal and urinary droplets leaping into the air via a commode flush made headlines in April in connection with possible COVID-19 spread, you could almost hear the world's bewilderment. Really? This now? Also: Ewwwww.

The health expert is going by the collective name Dear Pandemic on social media. retweets is healthy. "In academia, we were joking. If we publish a paper, maybe 20 people read the abstract and two people read the whole paper. Now, if Ashley writes a post, it's 2,000 to 5,000 the reach can of our viral a pandemic. They have the toxicity of but, says Neri case No. 91 overall is that ing information they avoid pot don't they ave mainly clarity.

which represent the virus. Flying toward the camera, she used "glitter glue glitter, and even more glitter" for a quick hand-washing lesson. (See below for the post about face.)

They cover tips for staying safe while protesting racial injustice, maternal mental health, how racism impacts health outcomes, and death statistics, too. But thanks to the thoughtful-ness that goes into creating a well-researched, balanced mix of content every week, Dear Pandemic manages to be a comforting antidote for doomscrolling.

"We recently made this Dr. Sreeram Poonen video. We had so much fun laughing about that," says Kumar, who adds that all of the women are extremely funny. "On our back channels, we're laughing about how many different ways can we message, yes, wear a mask."

Buttermilk and Ritter laugh. They say to realize the "side gig" easily adds up to no hours a week. "We had no idea what this was going to turn into," Buttermilk says.

So, once the superpower general "likes" one of your infographics and you have your very own branded T-shirts, what's next?

The group has formally established Dear Pandemic as a nonprofit, but they're looking at setting up for donations and possible commercialization models. Even if the team eventually expands beyond the Nerdy Girls nickname (from an inclusiveness perspective, Anonwita notes, members who join down the road may identify as male or nonbinary), Buttermilk and Ritter agree that even a COVID-less Dear Pandemic holds endless promise.

"I don't know what the future holds, but I am very optimistic that the importance of sharing scientific knowledge with the masses is a science that we can grow meaning forward," Ritter says. "Dear Pandemic is a beautiful example of how



Most Popular

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- Lumber prices are up 232% and 'could spiral out of control in the next few months'

NEWSLETTERS • BROADSHEET

Dear Pandemic: A braintrust of female scientists is answering your every COVID question

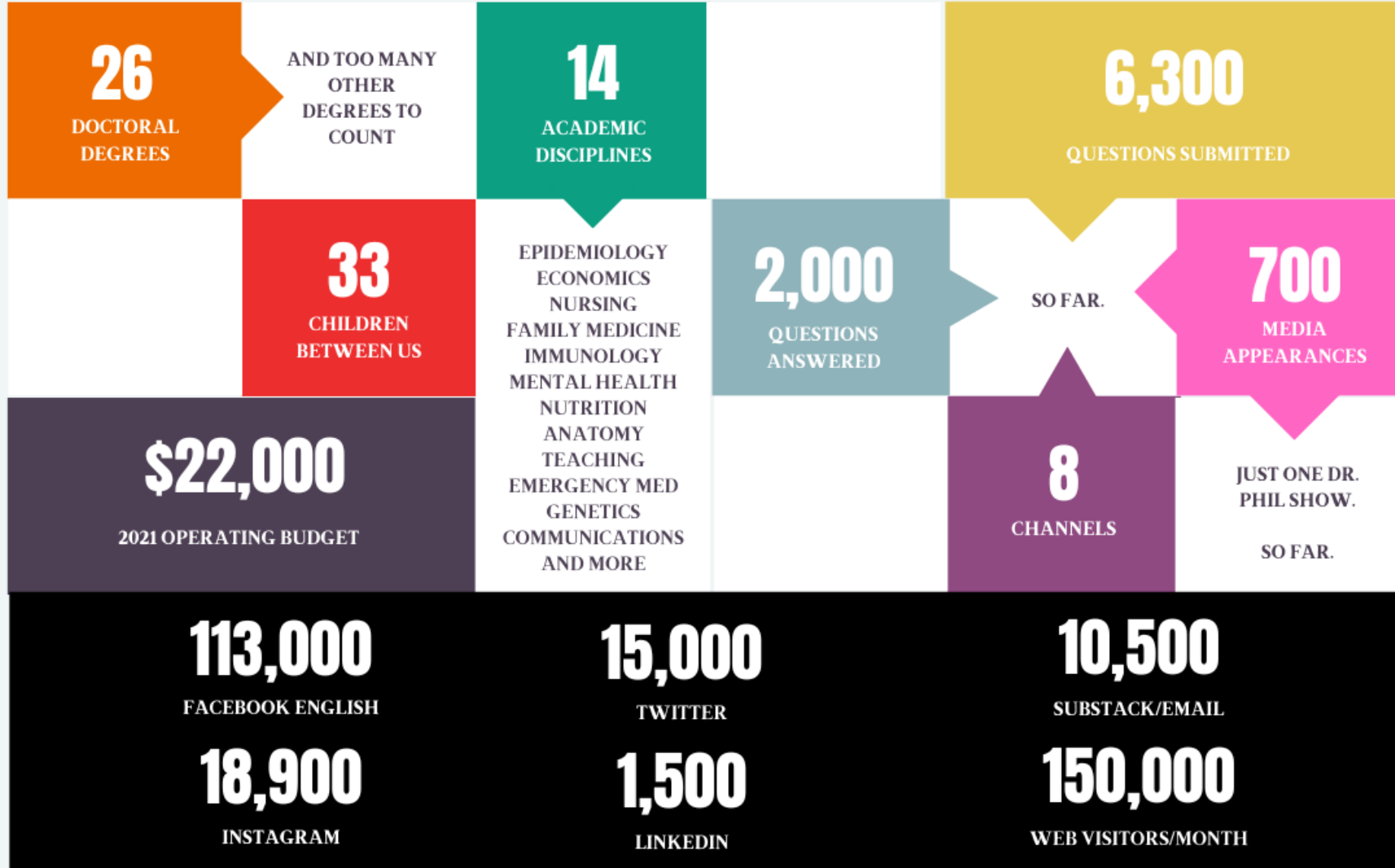
BY KRISTEN BELLSTROM AND CLAIRE ZILLMAN
March 12, 2021 8:24 AM EST



Dear Pandemic: Those Nerdy Girls and the Search for the Data Behind the Disease

Those Nerdy Girls

BY THE NUMBERS



Science Communication

Expert

Approachable

Trustworthy

Actionable



Why Social Media?

For better or worse, it's where people are.

Misinformation is supercharged by algorithms.

GOAL: Get better information into existing trusted networks AND improve information hygiene

Dear Pandemic Content



Dear Pandemic

logical fallacies series

“I’m just asking questions.”

[While many people have genuine questions about the pandemic that are important to answer, some use the pretense of having questions to engage in bad faith debate. If someone has multiple “questions” but does not listen to answers when they are provided, chances are that person doesn’t actually want to learn from the person they are questioning, but rather want to share their view and argue. This behavior, when repeated ad nauseum, is also known as “sealioning,” where a person repeatedly asks questions or demands evidence, pretending to be engaged in honest enquiry but refusing to be satisfied by any response provided. The goal is ultimately to spread doubt through questions and/or harass the person who is being questioned to the point of exhaustion, all while maintaining a pretense of humble enquiry. Ultimately, if the one being questioned stops responding (as is wise), the questioner may erroneously conclude they have won the argument because many of their bad faith questions remain unanswered.]

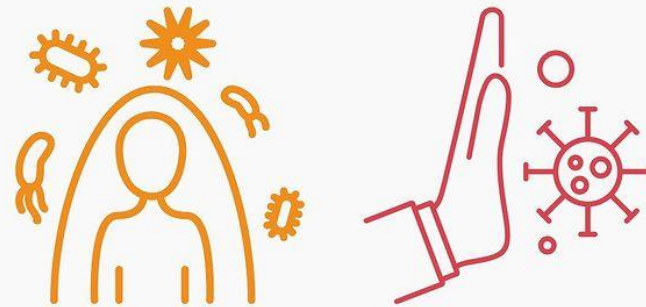
@dear_pandemic | @youcanknowthings



Dear Pandemic:

What does it mean to be immunocompromised?

GET THE FACTS IN THE POST 



Dear Pandemic:

Should I get a booster shot if I already had COVID-19?

GET THE FACTS IN THE POST 



Breaking down our approach

1. Trust is the name of the game
...lead with empathy

2. Stick to the facts

3. Meet people where they are

**Does my mask protect
me if no one else is
wearing one?**

GET THE FACTS IN THE POST 



Case numbers are jumping QUICK! What should I be doing?

INFECTION AND SPREAD

STAYING SAFE



Ashley Ritter, APRN, PhD

Share your gifts without sharing COVID. Helpful gestures come in many shapes.

One HUGE help: Cancel non-essential plans with other people.

Unfortunately, this includes New Year's Eve plans. The perfect storm of a new variant and holiday get-togethers is hitting communities and health care settings with FORCE! Testing is in short supply. Health care is under extreme pressure with surging cases. If you can avoid even one additional contact, you are helping. This is a temporary and urgent request (from a health care provider).

Wear a mask in public.

It works. It protects you and those around you and decreases the RAPID spread of the virus. If you have a choice on which mask, we recommend a surgical mask or KN95. If you have the capacity to supply others with a better mask, now is a great time to purchase and distribute better masks in your community.

Strive for OK.

This is not likely to be the best weeks of life. Lower the bar a bit and be OK with OK for a little bit. Even OK is a stretch for many at the moment. Focus on the things you do have control over. Avoid situations that could result in injuries or additional risk. Eat and sleep regularly. Keep the lights on at home and work. Some days will be better than others. Celebrate the wins!

Reflect and find joy in the little things.

“Bring on some more COVID” said no one ever. This really sucks. For everyone. Instead of focusing on all the crappy things going on in your world or the whole world, find something good. Tell someone else about that nugget of good. Reflect on the ways to create more good. (I’m sorry, English teachers). When you are feeling defeated, go back to this practice of reflection.

Help someone else.

Many are really struggling at the moment. This is a perfect time for excessive acts of kindness. Cooking a meal and delivering to a doorstep. Calling someone and asking about their day and just listening. Providing 20 minutes of supervision to a kid outside while a parent breathes. Being kind just because. We need ALL OF IT right now!

Those Nerdy Girls will continue to ride this uncertain wave with all of you and bring on the science as it evolves.

Love,

Those Nerdy Girls

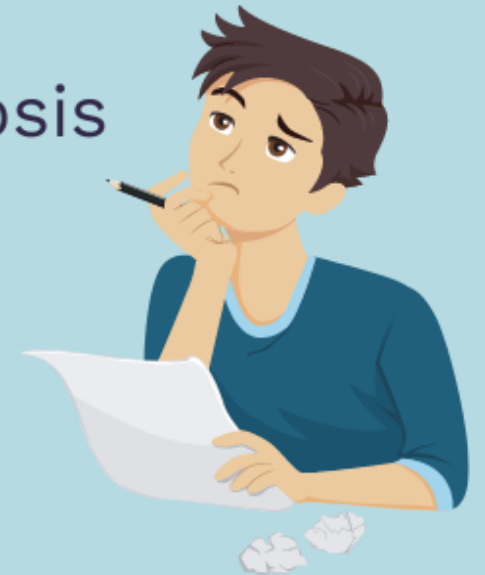


If we vaccinate 30 million people...

Over the next month, we expect based on NORMAL rates:

- ~12,000 will have a heart attack or stroke
- ~14,000 will have a new cancer diagnosis
- ~90 will be diagnosed with multiple sclerosis
- ~21,500 will die.

*These numbers are average U.S. population risk but would be even higher for older groups at higher priority for early vaccination.



MARCH 31, 2021

My uncle is knee-deep in COVID conspiracy theories. Any tips for respectfully engaging him?

UNCERTAINTY AND MISINFORMATION

A: Experts recommend the SART strategy: Show empathy; Affirm critical thinking; avoid Ridicule; and invoke conspiracy theory “exiters” as Trusted messengers. And it never hurts to remember that as humans we need to feel heard before we can truly listen.

We are primed to trust personal messages



We trust messages from:

- Friends
- Relatable strangers
- People in leadership positions
- People in trust roles

Local news, moms, religious leaders, barbers, doctors, nurses, medical techs, childcare providers

Plain Language Writing

One message per post!

Put the main take-away up top.

Easily express numbers (supporting facts)

Make message memorable (short and personal)

- Avoid jargon
- Short sentences
- Simple and strong topic sentences

Meet people where they are...



The Dear Pandemic Playbook:

Engage with your audience

Find the nodes of trust

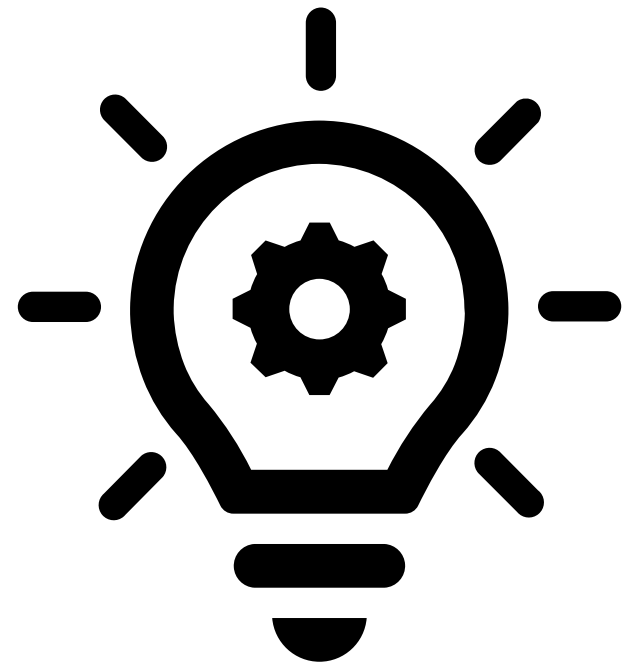
Lead with empathy

Simplify the message

Dial versus on/off switch

Cut off misinformation

SHARE reliable information!



Impact



I know Facebook is mostly a dumpster fire but evidence based Facebook pages disseminating public health information is EVERYTHING.

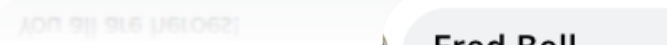
Follow **Dear Pandemic** and share their posts. For science!



Jaime Garland Garrigus
You are not just providing a critical educational service during the pandemic, you are inspiring girls everywhere to lean into data and science-nerdy is cool. You go girl!



Ann McCarthy
Well we are SO grateful! I use references from **Dear Pandemic** in my clinical practice and to help my friends and family untangle so much information. You all are heroes!



Btw, a colleague of mine has been on the fence about getting vaccinated and I asked if I could send her some info...shared some DP screenshots and now she's totally geeking out on the nerdy girls and ready to schedule her vaccine appt. ❤️ you're changing and saving lives!



Just wanted to share because of yesterday's the Dear Pandemic post on the new more transmissible variant and the mathematical examples, I was able to get someone to change their behavior and make a significantly less risky decision. The work you and the DP team is literally saving lives. THANK YOU!!!!

Fred Bell
Thanks for this post which even I found to make sense. While I don't always understand some of the details, it is clear that you explain the intricacies to others. I don't have to understand it all because you people have built a level of trust, and it is this level of trust which helps us feel confident that the vaccines are overwhelmingly safe.

Like · Reply · Message · 12h





Laura Lou

I don't think you guys can ever appreciate how important your page and information has been for those of us not in this field. Your information was shared with HR people, Church leadership, Plant Managers, college students (Including a nursing student) young moms and middle aged dads and cancer patients and children of cancer patients- and in my case - all the above including the moms in my mom group and perfect strangers at the grocery or church.

Thank you.

... ..



In brief: What we've learned about how to communicate science

1. Trust is more important than truth.
2. Fight the infodemic on its own turf.
3. Be specific and practical. Make it useful.
4. Make it painless. Better yet, make it funny.

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@DearPandemic



Twice-weekly email newsletter:

www.thosenerdygirls.org/subscribe

