

Case study

Innovative concepts to communicate science

DURING COVID-19

Contributor
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Country of implementation
United States of America

Start date of the initiative
March 2020

Track
Science communication by researchers

Target audience
Women

Website
<https://dearpandemic.org/>



Stay safe, stay sane.

Dear Pandemic:

Dear Pandemic: Empowering women to navigate the flood of information

Summary of the initiative

"Dear Pandemic" is an online communication platform created to support and empower individuals, especially women, to navigate science and public health information successfully during the coronavirus disease (COVID-19) pandemic.

The project was founded by an interdisciplinary, all-woman team comprising researchers and clinicians with expertise in medicine, epidemiology, demography, health policy, economics, mental health, nursing, behavioural science, and immunology. The team of volunteers engage in science translation work in addition to their day jobs. Through this double role, members of the team experienced first-hand the challenges women faced during the pandemic, and started the initiative to support them with evidence-based, practical advice.

The team publishes organized and reliable information on COVID-19 in simple language to enable its audience to understand complex concepts around the disease. The team also transparently cites scientific references from reliable sources, which clarifies misinformation and, importantly, facilitates users in their future information searches. Audiences are able to submit questions on the website and receive answers from the team's dedicated experts.

The project has five primary outlets for its content: a website,ⁱ Twitter,ⁱⁱ Instagram,ⁱⁱⁱ Facebook^{iv} and LinkedIn^v. Facebook is the team's primary social media platform, where new content is first posted. Articles and posts are cross-published across all five channels and are amplified as the audience shares them within their own networks. Content is published on a daily basis to offer readers a consistent and steady source of information on the COVID-19 pandemic. The posts are short, practical essays on topics high on the public agenda such as risk assessment, protective measures, testing, mental health, and information hygiene. The project also sends out a bi-weekly email newsletter with posts that are particularly timely.

Context and relevance of the project

At the beginning of the pandemic, the founders received numerous queries on COVID-19 from their respective families, friends, and social media contacts. To consolidate communication, reach a wider audience and provide a multidisciplinary, scientifically sound perspective, they decided to create Dear Pandemic and start an online platform. As the reach of the platform expanded, they recruited more volunteers and continued to disseminate comprehensive, and timely scientific content about the pandemic to lay audiences.

Above screenshot: dearpandemic.org

Summary of the analysis



Innovation factors

Since the beginning of the COVID-19 pandemic, people have been overwhelmed with information of varying quality (“infodemic”). Given the volume, speed, and technical language of the available information, many people struggled to understand it, or had further questions. This project acts as a supplement to official public health communication channels. The team relies upon official sources and their own scientific expertise to develop public health messages in a more accessible, relevant and understandable way. The content is updated as the science behind the pandemic evolves, creating reader trust by prioritizing transparency, accuracy, and timeliness. By using social media as a main channel for dissemination, the project further positions itself to address the existing flood of misinformation.

To establish a two-way communication channel, the team actively responds to questions from the audience. These questions and answers are published on the platform for other readers who may have the same or similar questions. Additionally, Dear Pandemic conducts occasional question-and-answer sessions on Facebook, where people can ask questions and receive answers in real time. Unlike traditional broadcast channels, this framework provides information according to the needs of the audience and treats them as equal members in a conversation.

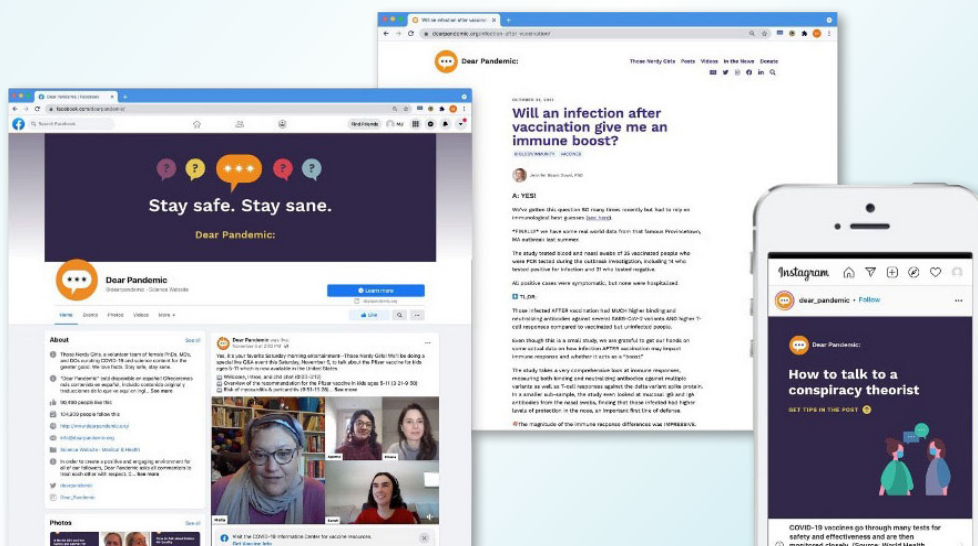
The project was initiated as a way to more effectively communicate with family and friends. The team has also maintained its personal tone with wider audiences by building relationships using dialogue, empathy and humour. Team members bring their own personality and style to their writing, which resonates with specific audience segments.

The interdisciplinary team enables the project to offer perspectives from various backgrounds. The content of the posts translates recent research results on COVID-19 into understandable lay summaries. Dear Pandemic assists people to navigate the vast amount of information and changing recommendations and provides timely, tailored, action-oriented advice. This model could be expanded to build trust in science by decreasing the distance between scientists and the public, and enhancing scientific and health literacy in this, and other domains.

Accuracy of scientific information

The project team ensures the accuracy of scientific information by relying on official public health guidance from trustworthy sources such as the World Health Organization, the United States Centers for Disease Prevention and Control, peer-reviewed publications, meeting reports of government bodies, trusted scientists on social media, and reputable journalistic sources. In addition, all team members have advanced academic training in public health, infectious diseases, medicine or other relevant areas.

The team provides references to the primary information sources to increase transparency and facilitate the audience’s own information search. In addition, the team shares resources of relevance to the target audience to complement their posts. For example, a step-by-step guide on how to video call family members, published by the BBC, was provided as part of a post about fighting pandemic loneliness.^{vi}



Dear Pandemic snapshots (from left to right): Facebook, website and Instagram. Copyright: Those Nerdy Girls. Credit: Mary-Jo Valentino



Impact on knowledge, attitudes and behaviour of the target audience

The results of an impact assessment of the project, as at November 2021, include the following:

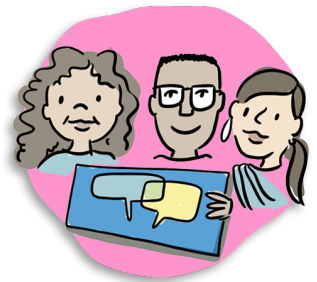
- over 200 000 users regularly follow one of the four social media channels, the newsletter, and/or the website;
- the website has over 5 million impressions/views per month;
- over 2000 pandemic-related questions have been answered;
- many readers have commented on the usefulness of the platform.

The team is currently conducting a qualitative assessment using an adaptation of the Risk Communication Evaluation Framework.^{vii}

In addition, the team is in the process of conducting a quasi-experimental impact evaluation. They are comparing Dear Pandemic's social media-based approach against a concurrent comparison group – an infodemiology campaign that prioritized a geographic approach. Preliminary results demonstrate that Dear Pandemic had a greater social media reach, while the comparison campaign had a greater geographic reach, as expected. However, there were significant spillovers across place-based and online engagement, with both campaigns' efforts resulting in community and digital education events in major national media outlets, and invitations to speak at national and global scientific and medical institutions.

Gender equality, equity and human rights considerations

The project team recognizes that women have been disproportionately affected by the pandemic. Women have taken on increased care burden for children and sick family members while fulfilling gainful employment and personal health concerns. As women working in science and caring for families at the same time, the project collaborators can relate to the challenges faced by fellow mothers. A key aim of Dear Pandemic is to provide practical advice for women in similar situations and reduce their struggle to find reliable, comprehensible and concise information.



The all-female team members are role models for girls and women aspiring to a career in science. The project gives visibility to women scientists and the important role they can take in science translation.

To make the content accessible to diverse audiences, a mirror page in Spanish was created on Facebook, named Querida Pandemia,^{viii} containing translations of a subset of the original Dear Pandemic posts. The team is also sensitive to populations with special needs, for example by including American Sign Language interpretation to their live question-and-answer sessions on Facebook.

The founding team has worked to recruit new members who represent diverse culture, racial, and professional backgrounds. Increased diversity of team members leads to better content for the project's core audience as well as provides appeal for new audience.



Limitations

Based on user data from three of the social media platforms, the project team noticed that the audience of Dear Pandemic is predominantly well-educated, white women. Indeed, using digital channels requires a certain level of media literacy, and a platform where most of the content is in English excludes people without English reading competency. The project has addressed this to some extent with its inclusive recruitment strategy and Spanish Facebook page.

A major challenge has been the gap between the public demand for science translation activities and the professional reward it brings. All of the scientists and clinicians have been contributing on a voluntary basis and are not recognized by the employing organizations. Hence, investing time and expertise into Dear Pandemic takes away income from activities considered of academic merit. It also reduces the time available for activities that are rewarded in the academy such as publishing peer-reviewed articles and winning research grants – potentially hindering career development. This highlights the need to promote science translation as an integral element of academic work, including adequate financial and institutional rewards. The success of Dear Pandemic and other science translation initiatives shows that research, communicated in an accessible, understandable and relevant manner, is in great public demand.



Looking forward

The team's targets for the advancement of the project are:

- to expand the scope beyond COVID-19;
- to form a separate channel for training female science communicators, called "Fight Like a Nerdy Girl"; and
- to obtain funding to make this effort sustainable over the long term.

References

- i. Dear Pandemic website (<https://dearpandemic.org/>).
- ii. Dear Pandemic Twitter site (<https://twitter.com/dearpandemic?lang=en>).
- iii. Dear Pandemic Instagram page (https://www.instagram.com/dear_pandemic/?hl=en).
- iv. Dear Pandemic Facebook page (<https://www.facebook.com/dearpandemic>).
- v. Dear Pandemic LinkedIn site (<https://www.linkedin.com/company/dearpandemic/>).
- vi. Dear Pandemic. Fighting loneliness; 2021 (<https://dearpandemic.org/fighting-pandemic-loneliness/>).
- vii. Savoia E, Lin L, Gamhewage GM. A Conceptual Framework for the Evaluation of Emergency Risk Communications. *Am J Public Health*. 2017 Sep;107(S2):S208–S214 (<https://pubmed.ncbi.nlm.nih.gov/28892436/>).
- viii. Dear Pandemic. Querida Pandemia (<https://www.facebook.com/QueridaPandemia/>).

Illustrations by Sam Bradd

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