

The Expert Next Door: A Commentary on Interactions with Friends and Family During the SARS-CoV-2 Pandemic

Andrea R. Molino, Kathleen M. Andersen, Simone B. Sawyer, Lan N. Doãn, Yonaira M. Rivera, Bryan D. James, Matthew P. Fox, Eleanor J. Murray, Lucy D'Agostino McGowan, Brooke A. Jarrett

Correspondence to Andrea R. Molino, Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, 615 N. Wolfe Street, Baltimore, MD 21205 (e-mail: amolino1@jhu.edu)

Author affiliations: Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States (Andrea R. Molino, Kathleen M. Andersen, and Brooke A. Jarrett); Center for Drug Safety and Effectiveness, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States (Kathleen M. Andersen); Department of Prevention and Community Health, George Washington University, Milken Institute School of Public Health, Washington, DC, United States (Simone B. Sawyer); Department of Population Health Section for Health Equity, New York University Grossman School of Medicine, New York, New York, United States (Dr. Lan N. Doãn); Department of Communication, Rutgers University School of Communication & Information, New Brunswick, New Jersey, United States (Dr. Yonaira M. Rivera); Rush Alzheimer's Disease Center; Department of Internal Medicine, Section of Epidemiology Research, Rush University Medical Center, Chicago, Illinois, United States (Dr. Bryan D. James); Departments of Epidemiology and Global Health, Boston University School of Public Health, Boston, Massachusetts, United States (Dr. Matthew P. Fox); Department of Epidemiology, Boston University School of Public Health, Boston, Massachusetts, United States (Dr. Eleanor J. Murray); Department of Mathematics and Statistics, Wake Forest University, Winston-Salem, North Carolina, United States (Dr. Lucy D'Agostino McGowan)

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ABSTRACT

The coronavirus disease 2019 (COVID-19) pandemic thrust the field of public health into the spotlight. For many epidemiologists, biostatisticians, and other public health professionals, this caused the professional aspects of our lives to collide with the personal, as friends and family reached out with concerns and questions. Learning how to navigate this space was new for many and required refining our communication depending on context, setting, and audience. Some of us took to social media, utilizing our existing personal accounts to share information after sorting through and summarizing the rapidly emerging literature to keep loved ones safe. However, those in our lives sometimes asked unanswerable questions, or began distancing themselves when we suggested more stringent guidance than they hoped, causing additional stress during an already traumatic time. We often had to remind ourselves that we are also individuals experiencing this pandemic, and that our time-intensive efforts were meaningful, relevant, and impactful. As this pandemic and other public health crises continue, we encourage our discipline to consider how we can best use shared lessons from this period, and recognize that our

professional knowledge, when used in our personal lives, can promote, protect, and bolster confidence in public health.

Keywords: communication; health communication; COVID-19; social media; minority health; pandemics; vaccine hesitancy

Abbreviations: COVID-19 (coronavirus disease 2019); SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)

INTRODUCTION

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic thrust epidemiology, biostatistics, and public health into the spotlight. Professionally, some of us pivoted to focus on or include SARS-CoV-2 in our work and nearly everyone encountered disruptions caused by the virus (1). As epidemiologic concepts became household names, we also found friends and family leaning into our expertise, causing our professional and personal lives to collide. This was a common experience, shared by many in public health, regardless of our level or area of expertise.

In this new role, we faced the challenge of balancing nuances of science with concrete advice, and communicating in a culturally competent manner. We attempted to protect and inform our communities, but squeezed these efforts between day-to-day school and work responsibilities.

Using professional knowledge in our personal lives was new and difficult for many, but as the pandemic continued, learning to navigate this space was, and remains, essential.

This commentary outlines experiences of using our professional expertise to communicate with people in our personal spheres during the pandemic. Our backgrounds range from recent masters graduates and doctoral students, to early career investigators and full professors. We aim to encourage others to leverage their public health skills and personal platforms to share information with their circles while taking steps to protect their relationships, time, and wellness.

USING OUR SKILLS AS PUBLIC HEALTH PROFESSIONALS

Throughout the pandemic, people in our lives have assumed that we had answers because of our public health affiliation. While readers likely know that public health is typically organized into subspecialties, our friends and family were often unaware of this. People reached out seeking advice on coronavirus disease 2019 (COVID-19) because we were the only public health experts they knew. For those of us who were not specialists in respiratory infectious diseases, we often felt uncomfortable answering questions outside our realm. Even for infectious disease epidemiologists, COVID-19 was new and guidelines have changed rapidly.

Despite this, we realized that our skills and training were useful in helping loved ones navigate the pandemic, and we ventured outside our comfort zones to assess emerging evidence. As it became clear that this pandemic was disproportionately impacting marginalized communities, those of us belonging to, or fiercely supportive of, those communities quickly realized that stepping up, providing facts, and communicating the seriousness of the situation was essential (2,3). However, some aspects of COVID-19 communication were in conflict with our training.

We are accustomed to communicating with precision and nuance — answering questions with “it depends,” then following up with a detailed explanation. This was frustrating to people looking for conclusive answers, particularly with the spread of misinformation. Additionally, many of us

were asked to predict the future, which is essentially impossible. Even the most experienced infectious disease modelers generally aim to provide an understanding of possible outcome ranges, rather than predicting specific trajectories. Likewise, we worried that our predictions could be wrong, resulting in a loss of trust. Simultaneously, we felt a self-driven obligation to offer guidance and highlight invisible populations in the public health response, since a nudge or reminder could prevent transmission and protect not only our family and friends, but also the larger community.

Beyond contextualizing high-quality information, equally important was the need to engage in public debate. In some examples, nuance was needed, such as explaining that lower antibody titers with a given vaccine does not necessarily correlate to reduced efficacy (4). In others, a firmer approach felt warranted: the science was clear; the media was not (5). In the case of hydroxychloroquine, several of us (MPF, LDM, BDJ, EJM, KMA) felt the need to go even further still, calling out problematic research from within our field (6). Navigating these interactions was challenging. We tried to avoid fueling political polarization of COVID-19 guidance and public distrust of scientists, while also addressing health misinformation, confusion, and rapidly changing evidence.

These experiences created tensions between the external appearance of authority and internal feelings of imposter syndrome. Friends, family, and acquaintances, at times, trusted us more than they trusted government guidance. Particularly for those of us with less experience, being a point person has been both challenging and rewarding. ARM, a recent epidemiology masters graduate, received phone calls asking what steps to take after a potential exposure. Although she mainly reiterated information the caller already knew, hearing it from an epidemiologist, with whom they had an existing relationship, seemed to bolster the caller's confidence. Risk communication

literature has long established that an individual's relationship with, and trust in, the communicator plays a substantial role in the effectiveness of the message during times of crisis. Believing that the person is knowledgeable, free of bias, and cares about your well-being validates and amplifies the message (7).

Feelings of inadequacy also applied to the more experienced authors. MPF, LDM, and EJM initially refrained from tweeting about COVID-19 because they did not directly study it. However, they came to realize that those doing COVID-19 work were overwhelmed and did not have time to answer all the press inquiries, particularly from local news outlets, and that epidemiologic questions were going unanswered. Twitter (San Francisco, California) quickly became a medium for connecting with journalists and gaining public trust through effective science communication.

USING PERSONAL SOCIAL MEDIA IS IMPACTFUL AND EFFECTIVE

Knowledge, like viruses, can be amplified exponentially via social networks. Even the smallest amount of expert engagement can have outsized benefits during a pandemic. To leverage connections, and in an attempt to keep those in our lives safe, we did public health outreach through our personal Twitter, Facebook (Menlo Park, California), and Instagram (Menlo Park, California) accounts, and through podcasts. Even with fewer than 1,000 followers, many of us found that using personal social media accounts to discuss COVID-19 was well-received.

However, the fear of "sounding like a broken record", or potentially contributing to fatigue and information overload, was constant and difficult to balance (7).

From a science communication perspective, social media provides an opportunity to present dense but important information in an inviting way. On Instagram, users can create "stories" that

consist of a series of images or videos. We found that each image acted as a bite size piece of information to help unpack epidemiological concepts. Friends and family appreciated seeing our explanations of primary data, and it reassured them to hear it from us rather than the media. For example, the US Food and Drug Administration vaccine panel reviews received considerable attention (8), and many people reached out to KMA, a pharmacoepidemiology doctoral candidate, with questions on the evolving landscape of vaccine information. Her Instagram stories became quick primers on vaccine safety and efficacy. She posted a Kaplan-Meier curve and explained why it showed evidence of early protection. She also gave relevant context around vaccine side effects, and quickly and compassionately responded to questions on ethical implications of the trials. Personalized social media posts emphasized that “one size does not fit all,” and the importance of avoiding generic messages when communicating health information (9). The right message at the right time from the right person can save lives (10), particularly when it comes to vaccine uptake.

The impact of our personal social media posts often carried beyond our immediate circles. BAJ, a doctoral candidate in infectious disease epidemiology, wrote a Google Document (Mountain View, California) titled, "Coronavirus Information for Family and Friends" in response to questions from their grandmother. Initially, BAJ shared the document with close family and friends, but reach rapidly increased; within a month, it garnered thousands of views. The document primarily compiled existing information from public health authorities, but being able to trace the author back through mutual contacts added an important layer of assurance for readers.

The rapid dispersion of COVID-19 information and resources through social media and personal conversations with family and friends shows the breadth of stakeholders in our social networks,

and the number of people who we could positively impact. It also highlights the need to ensure outreach to marginalized populations, who are made vulnerable to misinformation or may have inadequate access to health and public resources. For example, there has been limited, and often out-of-date, COVID-19 guidance and information in non-English languages, which has been the focus of LND's work among immigrant and limited-English proficient communities. To combat this, LND participated in Twitter takeovers of professional societies' accounts to engage researchers in understanding historical invisibility of Asian American health disparities in the context of the COVID-19 and also highlight the work of community-based organizations as exemplars in reaching linguistically-isolated and socially-marginalized populations in the COVID-19 public health response. Similarly, YMR, a bilingual behavioral scientist and health communication specialist, participated in multiple online COVID-19 Facebook Live webinars in Spanish, led by grassroots organizations in Puerto Rico. She explained how the public could identify and slow the spread of COVID-19 misinformation on social media and answered questions from the audience (11). Delivering simple information in the audience's language by trusted groups proved valuable to many community members.

SELECTING RELEVANT, PRE-DIGESTED CONTENT, AND SHOWING EMPATHY

In our experience, friends and family engaged more with personal "takes" on COVID-19 than reposted press announcements or scientific articles. To create new content, we carefully selected pertinent information and interpreted it to be more accessible. For example, after several instances of very rare vaccine safety signals were identified in Spring 2021, KMA wrote an informed take contextualizing the risk of vaccine-related blood clots with the risk of COVID-related blood clots and other daily risks like clots with oral contraceptives. Translating science in

a meaningfully and jargon-free capacity is crucial if we want friends and family to understand and make behavior changes (12).

For original content to be effective, it must also elicit an emotional connection, often requiring the creator to empathize with their audience. In the beginning of the pandemic, many of us erred on the side of extreme caution. Over time, we realized that such extreme measures were only possible for a small proportion of the population. Instead of aiming to eliminate risk, we instead considered a harm reduction approach, reducing risk as much as was feasible for specific economic, medical, cultural, and social situations. For instance, during the holidays, we learned that many in our circles would still be traveling against the United States Centers for Disease Control and Prevention recommendations. Accepting travel as a given, ARM, LDM, SBS, and BAJ encouraged people to quarantine, have smaller gatherings, take precautions while on airplanes, and reach out with questions (13,14). Similarly, other considerations were reframing terms in certain populations, like using ‘vaccine confidence’ instead of ‘vaccine hesitancy’, or tailoring information to be more relevant to high-risk or vulnerable populations, such as those living in multigenerational homes, essential workers, or undocumented immigrants who are reluctant to seek care.

When faced with misinformation, empathy can be radical. Taking cues from Dr. Heidi Larson, using active listening to acknowledge the stories behind misinformation can help build trust (15).

Tweaking phrases can create a less hostile environment. For example, asking “what have you heard?” is an attractive alternative to “what do you know?”. Gently pushing people to consider how misinformation does or does not fit with other things they believe can also be a step in finding common ground. For example, rather than trying to change someone’s mind in the moment, SBS, a social and behavioral sciences doctoral student, took the approach of providing

key messages that she knew would resonate. When engaging with misinformation shared on WhatsApp, YMR would send friends and family links to information correcting the content, while explaining how to identify possible misinformation in the future. In her words: change the behavior from “I share information, just in case it's true” to “I do not share information, just in case it's false.”

The option to walk away, however, is also always viable.

PROTECTING OURSELVES

We have learned many hard lessons about protecting our relationships, well-being, and professional limitations during this pandemic. In our personal relationships, we are seen at best as giving informed, caring guidance, but we have also been accused of judging people for their decisions or participating in the “establishment” preventing normalcy with lockdowns. Some friends and family have even withheld sharing information to avoid disagreement. This has led many of us to set boundaries with loved ones, for example, stating that we are always available to help but will only weigh in if asked, which has been disheartening when our main goal is to protect their health.

This has come up often for milestone events like weddings. For some, we offered empathy and availability to talk about risks while generally declining the invitation in a polite but firm manner. However, we had to acknowledge the tremendous disappointment and financial implications of postponing, cancelling, or reducing guest lists, heightened by it being a loved one experiencing disappointment. For others, with a small guest list and outdoor venue, the epidemiologist maid-of-honor charged themselves with arranging matching masks and advising on other logistical considerations of the scaled-back day.

Recognizing professional limitations was necessary when advising others. As private citizens with public health training, many of us felt morally self-obligated to share our knowledge but uncomfortable with requests to provide advice in any “official” capacity. BDJ turned down invitations to provide policy guidance to municipal governments, schools, and private companies about safe reopening. Similarly, as population health scientists, it is not our role to provide individualized medical advice. Sometimes our best response was explaining the limitations of our knowledge and helping find someone who knew the answer.

Stepping back and listening was often necessary. After the murder of George Floyd, we were reminded of the systems and structures that cause Black and other marginalized communities to disproportionately suffer from poor health outcomes. For SBS, conversations about COVID-19 quickly turned to the ills of racial injustice and begging friends and family to be safe while protesting. SBS grappled with the potential for protests to increase SARS-CoV-2 transmission while recognizing that not protesting racism, which contributes to health inequities and mortality, could also cost lives. SBS paused her health education to hear lines from Black men in her life saying “if I don’t die from COVID, then it’s the police in the street. It’s always something.”

With the need to constantly be “on our game” in sharing information, we put our own well-being at stake. We spent excess time creating content and answering COVID-related questions in lieu of nurturing relationships or doing our primary work. We even masked our emotions to keep others calm. However, we are simultaneously being challenged by the same pandemic — we too are stressed about our safety and the toll on our families. For LND, it has been particularly difficult to separate professional and personal life amid the rise of anti-Asian hate incidents, fearing for the safety of her family and the Asian American communities with whom she works.

While necessary to consume COVID-19 information on social media to stay abreast of new

research, circulating health misinformation, and ever-changing COVID-19 guidance and circumstance, these efforts made it impossible to avoid “doomscrolling” (i.e., obsessively checking news sites and social media despite depressing content). Perpetual anxiety, added to feeling responsible for those around us, undoubtedly has had negative effects on our mental health.

It is important to acknowledge the other negative sides of social media. Trolling, hate mail, personal attacks, and coordinated attacks are real possibilities when discussing politically sensitive topics, which the pandemic has unfortunately become. In particular, discussions about school safety and transmission among children have become extremely fraught, with a number of special interest groups being highly active in this space. As a result, Twitter discussions regarding the evidence surrounding face masks, transmission and illness among children, and the need for quarantining between school starts and holidays have been met with extreme responses, including hate messages and sustained trolling. For EJM, it became necessary to stop discussing COVID-19 in children on Twitter during Summer 2020 because of the volume of hate tweets. In such cases, we recommend limiting your notifications to followers, closing direct messages, and muting/blocking problematic accounts. Archiving particularly hateful or angry messages and connecting with officials at your institution may also be helpful if your safety is threatened, as was the case for one author after participating in a report calling for a national agenda to address health misinformation.

To counterbalance the pressure, we encourage our colleagues to remember that their efforts are appreciated and important. Focusing on creating a handful of well-timed but high-yield posts, emails, or other communications to motivate behavior change can both prevent our friends and family from feeling lectured at, and protect our time. Finally, everyone needs support and

deserves rest, especially as we collectively grieve. For some that includes regular mental health check-ins with a professional, or acknowledging that self-preservation is the best way to take care of ourselves and our communities. Additionally, peer support is, and has been, absolutely invaluable. In our meetings to discuss this commentary, we found catharsis in commiserating together. We hope readers feel similarly relieved.

CONCLUSION

In this commentary, we described our collective experiences communicating public health information to people in our personal lives during the COVID-19 pandemic as epidemiologists, biostatisticians, and other public health professionals. Understanding how we can leverage our positions and continue building relationships as trusted communicators is of dire importance, as this pandemic is clearly not over, and public health crises will likely continue to occur. Knowing how to communicate and tailor communication effectively are essential to protecting and informing our communities.

Regardless of subspecialty or years of experience, our personal circles see us as scientists first. We hope this commentary facilitates conversations on how to best utilize shared lessons from COVID-19, and encourages all public health professionals to recognize their influence and seek out others when needed. Together, we can use our professional knowledge in our personal lives to promote, protect, and bolster confidence in public health.

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