

## **Op-Ed: Use of Social Media Platforms by Deaf STEM and Medical Professionals**

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At the beginning of 2020, the SARS-CoV-2 virus — also known as the coronavirus-19 or COVID-19, was creeping toward the United States. Misinformation was rampant, especially on social media. This “infodemic” was widespread, with many questions and unknowns. Amidst so much speculation, factual information (e.g., World Health Federation, Centers for Disease Control and Prevention, White House, and many other top medical organizations) was made available to many, except one unique population. COVID-19 resources and information in American Sign Language (ASL) for the Deaf and Hard of Hearing (D/HH) population were scarce. The D/HH population also faced barriers in hospital accessibility, understanding proper isolation and hygiene measures, communication within a face-mask environment, knowing and recognizing COVID-19 symptoms and causes, among many other challenges .

In March 2020, the D/HH community was left without access to information when the pandemic struck the United States in full force. To combat this issue, the D/HH community, including D/HH individuals and ASL interpreters, came together and created many videos and accessible resources. However, this presented a time-tested challenge that has existed for many years within the D/HH community: How do we ensure that the information shared is correct and conceptually accurate? How do we deliver the same level of high-quality information coming from science organizations in a way that makes it accessible to many deaf people given that access to foundational science education has historically been limited?"

The number of D/HH individuals with expertise in the medical, science, and public health fields has grown, but continues to be limited. A few individuals with relevant training began to share COVID-19 information in ASL, information that was conceptually accurate and fact-based. More importantly, this information was accessible to all age groups and all education levels via accessible social media platforms. They included Deaf in Scrubs, Atomic Hands, and Health Signs Center.

*Deaf in Scrubs* is a social media platform created by Dr. Zachary Featherstone, a Deaf pediatrician, and Ian DeAndrea-Lazarus, a Deaf medical and doctoral candidate. The goal of Deaf in Scrubs is to disseminate medically-relevant information in ASL, starting with COVID-19. Topics included but were not limited to COVID-19 infection mechanisms, viral transmission, virus effects on the lungs that can result in morbidity and mortality, comparing COVID-19 to influenza, the importance of face masks, flattening the curve, and the possibility of reinfection. Videos were disseminated on Facebook, Instagram, YouTube, Twitter, and [deafinscrubs.com](https://deafinscrubs.com). The most popular videos were about flattening the curve and face masks. Collaborations with ASL news media outlets resulted in a few jointly-released videos that were viewed by hundreds of thousands of people.

*Health Signs Center* is a nonprofit organization founded by TraciAnn Hoglind, a Deaf public health professional, with the mission of promoting accessible public health information for the

community. COVID-19 materials include informational vlogs, short skits, and infographics on Facebook, Instagram, and [healthsignscenter.org](https://healthsignscenter.org). All are accessible in ASL with captioning, visual descriptions, and transcripts. Health Signs Center began sharing information about the pandemic when the virus it was still called 2019-nCoV. Since then, topics have included the basics and preventive steps of COVID-19 along with mental health, violence prevention, education, racism and xenophobia, maternal and child health, environmental health, and Internet reliability. Collaborations with several organizations also addressed pressing issues such as raising accountability for young adults to save lives during COVID-19 in partnership with the National Association of the Deaf Youth Section, and advocating for more Black, Indigenous, and People of Color (BIPOC) representation via the #OperationASLStoryTime hashtag with Transformative Deaf Education.

*Atomic Hands* ([atomichands.com](https://atomichands.com)) is a nonprofit organization founded by two Deaf scientists, Dr. Alicia Wooten, an immunologist, and Dr. Barbara Spiecker, a marine biologist. Both recognized the difficulties of English-based learning, the lack of networking with Deaf STEMists, and the frustration of not being able to access science videos. Atomic Hands has the mission to: (1) foster wonder and curiosity in the fields of science, technology, engineering, and mathematics (STEM) through the production and dissemination of ASL; (2) empower the community to expand ASL by developing and delivering engaging STEM-related topics through creative language play, and (3) encourage collaboration and networking opportunities among current and future Deaf STEMists and the community. While Deaf in Scrubs and Health Signs Center led the efforts for COVID-19 ASL outreach, Atomic Hands recognized the importance of ASL-centric resources that are research and fact-based. Dr. Wooten also led outreach efforts at Gallaudet University by hosting one of the first live webinars on COVID-19 on March 11, 2020. She continued to participate in webinars, interviewed Dr. Anthony Fauci, and hosted an *Ask Dr. Wooten* session for the community.

All of the videos released by each of these three groups received extremely positive feedback, with thousands of views. Many viewers commented on various social media platforms about their usefulness and much-needed support. In fact, the COVID-19 related posts and videos combined had a reach of over 1,100,000 viewers and over 100,000,000 engagements. This is in addition to ASL-friendly media outlets that we have interviewed with or shared information with. Overall, the D/HH community's general understanding of COVID-19 has dramatically improved. Many individuals have stated that our resources helped with their mental wellness, clarified myths and misunderstandings about COVID-19, especially among youth, and ultimately helped them ensure they were living optimally in terms of health and wellness.

With the immense reach of social media and the proliferation of D/HH individuals in medicine and STEM, we call for D/HH professionals to provide expertise in their respective fields amidst this pandemic and for future global events.