

Resolution on The Role of Health Communication AI in Advancing Health Equity for All

The Global Alliance for Behavioral Health and Social Justice is committed to applying a human rights framework in policy development and system-level changes to population health and well-being. Artificial Intelligence (AI) is evolving faster than policy, practice, and research can keep up with – and is both a threat to and an opportunity for health and well-being globally. In order to address emerging needs and prioritize well-being for *all people* in this environment, we strongly advocate that the field of health communication embrace an evidence-based, people-centered, and scalable approach to communicating about health – one that leverages the power of AI for good, or what is being called “Health Communication AI.”ⁱ

Health is a human rightⁱⁱ and the act of communicating about health is, at its core, in service of advancing positive health outcomes for all.ⁱⁱⁱ Misinformation, defined as that “which is fake or misleading and spreads unintentionally,”^{iv} threatens this, disproportionately affecting historically marginalized and minoritized communities.^v While misinformation happens across media types, it occurs at a speed and scale in digital and social media not found elsewhere. According to one study of Canadian youth, 84% reported being unsure that they could distinguish true from false content on social media.^{vi} Moreover, AI-generated misinformation significantly increases the spread and exposure to misleading health and medical information.^{vii}

However, the American Academy of Pediatrics (AAP) has resolved that “AI technologies can usefully advance population health, increase access to care, reduce inequities in health outcomes, increase early intervention, mitigate health risks, tailor prevention strategies, and broadly promote personal wellbeing”^{viii} and has called “on stakeholders to collaborate with... experts to develop and implement strategies that promote accurate health information, science literacy, and counteract misinformation.”^{ix} This aligns with Healthy People 2030’s goal to improve health communication, specifically, “making electronic health information easy to understand and [useful in support of] improving health and well-being.”^x Moreover, the 2021 UN Committee on the Rights of the Child has called for “the provision of unbiased and equitable access to digital services” as part of states’ and businesses’ obligations to and responsibilities for the protection of children.^{xi} Thus, while AI may be a driver of such information, working in partnership with human health communicators, it also has the potential to be exactly the tool the field needs to combat these issues.

We know that:

- There are **70,000** health-related Google Search queries per minute.
- There are **1 billion** searches for health and medical information every day worldwide.
- **Over 75%** of consumers are concerned about misinformation from AI.
- There has been a **1,000% increase** in the number of websites hosting AI-created false articles over the last year.
- **63%** of the public, including **56%** of AI users, are not confident that AI chatbots currently provide accurate health information.

Health Communication AI as Part of the Solution

Early research suggests that AI can do this, specifically deliver accurate health information and empathetically convey difficult news.^{xii,xiii} More powerfully, however, AI has the capacity to do this at scale – a scale that humans on their own simply cannot achieve.^{xiv}

Our understanding of opinion leaders (or individuals who exert substantial influence within their social network) and trust building offers a foundation for contemplating the role of AI in health communication and addressing health misinformation. There is a rich literature evincing how opinion leaders can be credible and trustworthy voices for the dissemination of quality health information – both online and off.^{xv,xvi,xvii,xviii,xix} Such early research on AI builds on this and provides preliminary evidence that AI can successfully replicate such human-to-human interactions.^{xx,xxi}

Health Communication AI^{xxii} is a new way of communicating in today’s AI-driven environment. At its core, it is an AI-enabled chatbot that can reach and engage anyone anywhere and at any time in empathetic ways with evidence-based health information tailored for them. Topics that Health Communication AI can share information on may include vaccination, mental health support, diet and nutrition trends, circumcision, abortion, suicide, eating disorders, and HIV.^{xxiii} In doing so, Health Communication AI can help to achieve the basic human rights of health, wellbeing, and justice for all.

For Health Communication AI to be successful, though, practitioners, policy makers, scientists and users, must engage in these early stages in order to have a voice in the development of these AI tools and models. We need to do this to ensure both that these tools work for health purposes, that culture and language are central to their development, and that issues of systemic and historical racism, marginalization, bias, and trauma are considered in their development – so that they work for all.

To this end, and consistent with our values, the Global Alliance is calling for a broad commitment to the exploration of “Health Communication AI,” in order to better understand:

- How to develop and utilize this technology so that it provides quality, accurate, tailored, and culturally and linguistically relevant information empathetically to all people.
- The potential barriers, access issues, and negative health consequences of using AI for health communication, and how we can build supports and resources for people as they increasingly engage in this way for this kind of information.
- What research and evaluation, training, and other early investments are needed to integrate AI into health communication safely, effectively, and in culturally and linguistically relevant ways.

Additional Resources
<ul style="list-style-type: none"> • https://www.tandfonline.com/doi/full/10.1080/10810730.2024.2357575 • https://yoursay.plos.org/2024/05/introducing-health-communication-ai-the-next-iteration-of-opinion-leader-for-the-age-of-artificial-intelligence/ • https://www.statnews.com/2024/06/27/medical-ethics-early-integration-ai-health-product-development/ • https://www.norc.org/research/projects/health-communication-ai.html • https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10250563/
<p style="text-align: center;">How You Can Help</p> <ul style="list-style-type: none"> • Lean in and keep learning. Take steps to learn more about AI and how it effects how we communicate about health. This could include listening to podcasts, reading media and scientific articles, watching webinars, and attending conferences. • Get engaged. Join the Global Alliance to have a say in how we can use Health Communication AI for good for all. • Use your voice. Be active in social media about how AI can be a useful tool for combatting misinformation and addressing health inequity. • Contribute to the evidence base. Design and implement field research studies that examine the roles of AI in global mental health and well-being and submit your papers to the American Journal of Orthopsychiatry (AJO).

This resolution has been principally drafted by Amelia Burke-Garcia with contributions by Gita Jaffe.

References

- ⁱ Burke-Garcia, A., & Soskin Hicks, R. (2024). Scaling the Idea of Opinion Leadership to Address Health Misinformation: The Case for “Health Communication AI.” *Journal of Health Communication*, 29(6), 396–399. <https://doi.org/10.1080/10810730.2024.2357575>
- ⁱⁱ <https://sdgs.un.org/goals/goal3>
- ⁱⁱⁱ <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-communication>
- ^{iv} Muhammed, T. S., & Mathew, S. K. (2022). The disaster of misinformation: A review of research in social media. *International Journal of Data Science and Analytics*, 13(4), 271–285. doi:10.1007/s41060-022-00311-6
- ^v <https://misinforeview.hks.harvard.edu/article/covid-19-disinformation-and-political-engagement-among-communities-of-color-the-role-of-media-literacy/>
- ^{vi} <https://www.innovation.ca/news/young-people-tell-us-they-need-help-identifying-misinformation>
- ^{vii} Burke-Garcia, A., & Soskin Hicks, R. (2024). Scaling the Idea of Opinion Leadership to Address Health Misinformation: The Case for “Health Communication AI.” *Journal of Health Communication*, 29(6), 396–399. <https://doi.org/10.1080/10810730.2024.2357575>
- ^{viii} <https://www.apa.org/about/policy/statement-artificial-intelligence.pdf>
- ^{ix} <https://www.apa.org/about/policy/combating-misinformation-promoting-literacy.pdf>
- ^x <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-communication>
- ^{xi} Livingstone, S., Third, A., & Lansdown, G. (2024). "Chapter 31: Children vs adults: negotiating UNCRC General comment No. 25 on children’s rights in the digital environment". In *Handbook of Media and Communication*

Governance. Cheltenham, UK: Edward Elgar Publishing. Retrieved Aug 30, 2024, from <https://doi.org/10.4337/9781800887206.00042>

^{xii} Webb, J. J. (2023). Proof of concept: Using ChatGPT to teach emergency physicians how to break bad news. *Cureus*, 15(5). doi:10.7759/cureus.38755

^{xiii} Yeo, Y. H., Samaan, J. S., Ng, W. H., Ting, P. S., Trivedi, H., Vipani, A., Ayoub, W., Yang, J.D., Liran, O., Spiegel, B., & Kuo, A. (2023). Assessing the performance of ChatGPT in answering questions regarding cirrhosis and hepatocellular carcinoma. *medRxiv*, 29(3), 721.

^{xiv} Burke-Garcia, A., & Soskin Hicks, R. (2024). Scaling the Idea of Opinion Leadership to Address Health Misinformation: The Case for “Health Communication AI.” *Journal of Health Communication*, 29(6), 396–399. <https://doi.org/10.1080/10810730.2024.2357575>

^{xv} Rogers, E. M. (1962). *Diffusion of innovations*. <https://blogs.unpad.ac.id/teddykw/files/2012/07/Everett-M.-Rogers-Diffusion-of-Innovations.pdf>

^{xvi} Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.

^{xvii} Valente, T. W., & Pumpuang, P. (2007). Identifying opinion leaders to promote behavior change. *Health Education & Behavior*, 34(6), 881–896. doi:10.1177/1090198106297855

^{xviii} Burke-Garcia, A. (2017). *Opinion leaders for health: Formative research with bloggers about health information dissemination* (Doctoral dissertation). George Mason University.

^{xix} Burke-Garcia, A. (2019). *Influencing Health: A comprehensive guide to working with online influencers* (1st ed.). New York, NY: Productivity Press.

^{xx} Ayers, J. W., Poliak, A., Dredze, M., Leas, E. C., Zhu, Z., Faix, D. J., Goodman, A. M., Longhurst, C. A., Hogarth, M., & Smith, D. M. (2023). Comparing physician and artificial intelligence chatbot responses to patient questions posted to a public social media forum. *JAMA Internal Medicine*, 183(6), 589. doi:10.1001/jamainternmed.2023.1838

^{xxi} Liu, S., McCoy, A. B., Wright, A. P., Carew, B., Genkins, J. Z., Huang, S. S., Peterson, J. F., Steitz, B., & Wright, A. (2023). Leveraging large language models for generating responses to patient messages. *medRxiv*, 2023–07.

^{xxii} Burke-Garcia, A., & Soskin Hicks, R. (2024). Scaling the Idea of Opinion Leadership to Address Health Misinformation: The Case for “Health Communication AI.” *Journal of Health Communication*, 29(6), 396–399. <https://doi.org/10.1080/10810730.2024.2357575>

^{xxiii} Burke-Garcia, A., & Soskin Hicks, R. (2024). Scaling the Idea of Opinion Leadership to Address Health Misinformation: The Case for “Health Communication AI.” *Journal of Health Communication*, 29(6), 396–399. <https://doi.org/10.1080/10810730.2024.2357575>