Tackling the Next Pandemic: An Infodemic in Clinical Oncology Care

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While oncology clinicians manage variations of the COVID-19 virus and other infectious threats to their patients, another pandemic has gained momentum and become a core concern of clinical oncology nursing practice.

As defined by the World Health Organization (WHO, 2022b), a pandemic is an epidemic that occurs worldwide, crossing international boundaries and usually involving a large number of people. In its efforts to identify and expand on the threat of pandemics, WHO (2022a) states that an infodemic is too much information, including false or misleading information, in digital and physical environments during a disease outbreak. It causes confusion and risk-taking behaviors that can harm health. It also leads to mistrust in health authorities and undermines the public health response (WHO, 2022a).

Unfortunately, healthcare misinformation is now embedded in society and has become a growing obstacle to providing evidence-based, clinically appropriate oncology care. Once considered a peripheral issue that only affected fringe populations, this infodemic steadily exposes healthcare misinformation to patients and their caregivers. Among several shifting environments associated with misinformation are acknowledgment—and some acceptance—of conspiracy theories, overall distrust of societal institutions, and a steady and strident devaluing of science-grounded healthcare information.

In some quarters, turbulence in these environments has been ginned up by a steady rejection of the threat of the SARS-CoV-2 virus and any expectation that vaccines are effective. Thus, the anti–COVID-19 pandemic atmosphere has affected clinical oncology practice, generating healthcare information and commentaries that have been misleading, exploitative, and toxic (Fillon, 2022; Grimes, 2022; National Library of Medicine, 2021).

The following are a few studies that characterize this infodemic:

- A 2021 literature review of 69 studies about health misinformation in social media indicated that 40% of the studies had moderate misinformation rates about diseases (i.e., noncommunicable diseases and pandemics), particularly in the case of cancer (Suarez-Lledo & Alvarez-Galvez, 2021).
- A 2021 study evaluated the accuracy of cancer treatment information on social media and its potential for harm. Based on a review of 50 of the most popular articles posted on social media on each of the four most common cancers, nearly one-third of the articles contained misinformation or harmful information. In addition, two of three articles with misinformation contained harmful information (Fillon, 2022; Johnson et al., 2021).
- In 2018, the journal *Science* reported a first-of-its-kind study on the spread of healthcare misinformation, based on 10 years of articles shared on Twitter—about 126,000 news stories tweeted by about three million people more than 4.5 million times. Based on study findings, the researchers extrapolated that false news reached more people than the truth; the top 1% of false news reached 1,000–100,000 people, and true stories rarely reached more than 1,000 people (Vosoughi et al., 2018). Of note, data for this study were collected from 2006 to 2017, so the prevalence of misinformation spreading has only increased.

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For clinical oncology nurses providing care to patients and their caregivers, combating an infodemic is as important as any other core component of clinical oncology care. For example, misinformation can cause patients to mistrust factual information about their cancer diagnosis and treatment options. Misinformation can contribute to leeriness from diverse populations of patients and their caregivers that their care is a top priority, particularly when access to care is affected by race, ethnicity, gender, sexual identity, financial status, and other social determinants of health. Finally, misinformation can give misplaced credibility to miracle cures and predatory providers touting unproven treatments (Fillon, 2022; Grimes, 2022).

So, let us confront this infodemic in health care realistically. Every oncology nurse can join their colleagues on the front lines of healthcare delivery to limit misinformation in oncology care and patient decision-making. Let us work toward less misinformation circulating in the minds of our patients by doing the following:

- Combat misinformation by drilling down to determine the origin of that misinformation as relayed by patients. Is it from opinion-based social media sources? Was it passed on to the patient by a family member or friend? Could information just be hearsay from an unreliable source? Dispense your apathy about misinformation (i.e., "cannot change their mind") and talk to your patients about misinformation. Help patients become knowledgeable consumers of healthcare information, advancing their health literacy (Grimes, 2022; Hyatt et al., 2022; Johnson et al, 2021; National Library of Medicine, 2021; Teplinsky et al., 2022).
- Determine why patients believe misinformation in the context of their culture and motivations. We know from limited research about healthcare misinformation that believing misinformation is complicated. Why are patients drawn to what they want to believe? Among many factors that contribute to a complex misinformation amalgam are psychological factors (e.g., anxiety, fear, emotion) and belief systems (e.g., cognition, identity, who has influence) (Chou et al., 2020; Hyatt et al., 2022; Teplinsky et al., 2022).
- Contribute to evidence-based studies to debunk healthcare misinformation. For these studies, so many variables can be the focus, such as target populations, influencers, clinical content, belief systems, patient attitudes and biases, disparities in healthcare access, and effective provider responses to erroneous information (Chou et al., 2020; Grimes, 2022, Hyatt et al., 2022; Teplinsky et al., 2022).
- Continue to establish trust with our patients, so they depend on their oncology nurse as a source of reliable and accurate information.

Continuing a 20-year, continuous streak of Gallup polls about respected professions, nursing remains the leading profession perceived with high honesty and ethics. The latest Gallup poll reported that nurses even superseded physicians in trust and ethical practice (81% for nurses versus 67% for physicians) (Saad, 2022). When we practice from a foundation of clinical evidence and expertise, clinical oncology nurses can limit the impact of this healthcare infodemic one patient at a time. Let us rid healthcare misinformation as a factor that complicates quality clinical oncology care.

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