



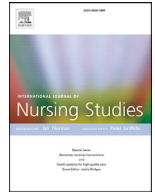
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Guest Editorial

COVID-19 pandemic, infodemic and the role of eHealth literacy



Community engagement is crucial to arrest the threat posed by the novel coronavirus (COVID-19) outbreak. However, the COVID-19 pandemic has been accompanied by an “infodemic”, a term that has been used to refer to the rapid spread of misinformation or fake news through social media platforms and other outlets. The spread of this misinformation may cause people to act inappropriately and jeopardize the efforts of governments and health authorities to manage COVID-19, inducing both panic and xenophobia (Centers for Disease Control and Prevention, 2020). The World Health Organisation (WHO) and health authorities worldwide are now working closely with social media platforms including Facebook, Google, Twitter and YouTube to provide evidence-based information to the general public trying to actively counter the misinformation that is circulating (Zarocostas, 2020). Nevertheless, the provision of accurate and quality information is likely to be insufficient to ensure optimal public health outcomes if the influence of eHealth literacy is not accounted for.

eHealth literacy is based on the concepts of both health and media literacy, which refers to an individual's ability to seek, understand and appraise health information from electronic resources and make informed health decisions for addressing a health problem in everyday activities (Norman & Skinner, 2006). Studies have shown that poor health literacy in general affects how patients with long-term conditions respond and manage their health problems and related fear (Neter & Brainin, 2019), it is independently associated with several undesirable health outcomes, including hospitalization, mortality and health care cost (Berkman et al., 2011). In the context of infectious diseases, there is some evidence supporting the role of low health literacy in lack of understanding of proper antibiotic use and reduced vaccination uptake (Castro-Sanchez, Chang, Vila-Candel, Escobedo, & Holmes, 2016; Lorini et al., 2018), although evidence regarding eHealth literacy in responding to the overwhelming influx of information about emerging infectious diseases from various social media and digital resources, remains limited.

The worldwide penetration of smartphones opens ample opportunities for people to access instant health-related information (and misinformation). In this context, the COVID-19 infodemic has created a very complex social environment to be navigated by the public in order to remain healthy and take appropriate preventative steps using the information available. The sheer volume of information and messages about COVID-19, which in itself can cause uncertainty and anxiety, creates a major challenge for eHealth literacy. The 2014 Ebola epidemic, in which social media rumours created hostility towards health care workers (Oyeyemi, Gabarron, & Wynn, 2014) and the continuous anti-vaccine social media posts,

which seemingly legitimize debates about vaccine safety and may have reduced the vaccination rate (Smith, 2017), provide well established examples of the consequences of the spread of misinformation, which may be mirrored in the COVID-19 pandemic. Apart from the conspiracy theories, claiming that 5G mobile networks adversely affect the human immune systems and result in COVID-19 spread (Adam & Alba, 2020), the rapid dissemination of premature evidence regarding the potential efficacy of chloroquine for COVID-19 patients (Ferne & Aronson, 2020), fuelled by social media, has brought fatal consequences (Waldrop, Alsup & McLaughlin, 2020). It is foreseeable that when a vaccine for COVID-19 is made available, there will be a flood of anti-vaccination conspiracy theories being spread among the digital networks, negatively impacting on the public health efforts against COVID-19.

Understanding the role of eHealth literacy in the control of COVID-19 outbreak is vital. Apart from using validated tools to assess the prevalence of eHealth literacy in the context of infectious diseases, it is also important to examine the interconnected roles of eHealth literacy and health-related misinformation on the public's decisions in taking measures to reduce the COVID-19 spread, such as hand washing, wearing a mask and practising physical distancing. The focus of eHealth literacy assessments and potential interventions in response to COVID-19 needs to move beyond addressing functional health literacy (ability to obtain relevant health information), beyond clinical care settings and beyond the individual (Chinn, 2011; Sykes, Wills, Rowlands, & Popple, 2013). Empowering the public with better critical health literacy in general, strengthening community capabilities through social participation and dialogue could be one strategy to combat COVID-19 related misinformation on social media (Chinn, 2011; Nutbeam, McGill, & Premkumar, 2017). Indeed, recent actions taken by governmental agencies to partner with various social media giants (e.g., Google, Facebook, Instagram, Weibo, WeChat) to flag, fact-check and eliminate misinformation opens up opportunities for collaborative learning and social support among the public in strengthening critical health literacy, but perhaps further research is needed to examine how critical health literacy might be developed at a population level in practice and ultimately measured.

The COVID-19 infodemic may now be spreading faster than COVID-19 itself in many countries, yet the health literacy level of the public in handling health-related information is often overestimated by health care professionals (Dickens, Lambert, Cromwell, & Piano, 2013). Nurses are well positioned in the health care system to empower clients' abilities to understand and utilize health information for their own health. The American Academy of Nursing's recommended health literacy “universal precautions” require prac-

tioners to make an assumption that the public may have difficulty in comprehending information and thus as a minimum, clients' understanding of information related to their own health must always be confirmed (Loan et al., 2018). More broadly, in the current context of digital communication, we urge researchers, academics and health authorities to consider how eHealth literacy may play an important role to facilitate better, more health-literate, infection prevention and control in the public.

Conflict of Interest

We declare no competing interests.

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