eHealth Education

Methods to enhance oncology nurse, patient, and caregiver teaching

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BACKGROUND: eHealth can enhance the delivery of clinical cancer care by offering unique education opportunities for oncology nurses, patients, and family caregivers throughout the cancer trajectory.

OBJECTIVES: This article reviews eHealth technology that can be applied to oncology education, such as mobile health applications, text messaging, web-based education, and audio- and videoconferencing.

METHODS: Case studies provide exemplars of eHealth technologies used for delivering oncology education to nurses, patients, and caregivers.

FINDINGS: By using eHealth technologies to obtain and provide education, oncology nurses are well positioned to improve the lives of patients and caregivers.

IMPROVED ONCOLOGY NURSE, PATIENT, AND CAREGIVER EDUCATION is essential to caring for and meeting the needs of the ever-growing population of individuals with cancer. However, despite increased attention to the challenges of cancer care and the establishment of clinical guidelines for symptom management, previous studies indicate that patients with cancer and their caregivers often express dissatisfaction with their health care and the information provided to them during the cancer trajectory. In an international survey of women with metastatic breast cancer, 41% of women expressed the need for more easily accessible patient education (Cardoso et al., 2016). Insufficient education on supportive care can also increase challenges related to the cancer experience. Patients with cancer and their caregivers who lack the necessary education are tasked with adopting a more autonomous role in information seeking and self-education to manage day-to-day life during their cancer journey. Addressing unmet education needs on a variety of topics (e.g., healthcare system/information, patient care, supportive needs) has been found to lessen the impact of increased symptom burden on quality of life among women with breast cancer (Cheng et al., 2016). The evolution of the Internet and other digital technology has driven a rapid expansion of communication, and widespread adoption of this technology has expanded healthcare education by enabling efficient delivery via multimodal communication platforms (Curran et al., 2019).

Background

eHealth refers to all electronic and digital processes related to health (Triberti et al., 2019). A variety of eHealth technologies are available for use by healthcare providers to improve communication and patient care. These technologies include the Internet, intranet, telephone, videoconferencing, email, and text messaging. Telehealth, which is one facet of eHealth, is comprised of all health activities that use technology to connect individuals virtually instead of in person to provide health-related education. Telehealth is often used to describe education provided either over a telephone call or through videoconferencing technology. Additional eHealth technologies that can be applied to education include web-based, self-guided programs that can be delivered through a website (Barak et al., 2009) and mobile health (mHealth) applications or text messaging services that deliver health education through mobile devices, such as smartphones or tablets (Olla & Shimskey, 2015).

Advancements in eHealth have also provided important methods for improved communication and education among healthcare professionals. eHealth can support oncology nurses, keeping them up to date on rapid