DIGITAL COMPETENCY: IS IT ESSENTIAL FOR NURSES?

The labor market is in transformation. Regardless of the industry analyzed, the speed of changes triggered by technology is remarkable. The same is true in the health care industry: technology, along with its inherent advantages and challenges, has already been incorporated into health care professionals' many work processes. Examples include electronic medical records, decision support systems, the disappearance of film in diagnostic imaging, the advancement of telemedicine, robotic surgery, and automated medication dispensing systems. In critical care units such as in intensive therapies and in the operating room, where there is intensive use of technology, these transformations are more evident.

This transformation, however, is not only limited to new equipment, instruments and materials. With the advancement of Internet-enabled information and communication technologies (ICTs), we are moving towards new practice models and even deeper changes in the way health care services are organized. Thus, nurses are required to be competent in new areas in order to adjust their professional performance and manage assistance processes that are adapted to contexts concerning network connection and interaction.

Digital competency, which is considered a cross-curricular competency,

> is the set of knowledge, skills, attitudes (thus including abilities, strategies, values and awareness) that are required when using ICT and digital media to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, reflectively for work, leisure, participation, learning, socializing, consuming, and empowerment[1].

Digital competency has been recognized by the European Parliament and the European Council, since 2006, as one of eight key competencies for lifelong learning and insertion in the society of knowledge. It is necessary to acquire other competencies, which are: communication in one's mother tongue, communication in foreign languages, mathematical competency and basic competency in science and technology, learning how to learn, social and civic competency, initiative and entrepreneurial spirit, and cultural sensitivity and expression. It is proposed to be developed in five areas and evaluated considering three levels of proficiency — basic, intermediate and advanced[2-4]:

1. Information as well as data and information literacy: to identify, locate, retrieve, store, organize and analyze digital information, assessing its relevance and purpose;
2. Communication and collaboration: to communicate in digital environments, share resources through online tools, connect with others, collaborate using digital tools, interact and participate in communities and networks, have intercultural awareness;
3. Digital content creation: to create and edit new content (texts, images, videos etc.), integrate and rework prior content and knowledge, produce creative expressions, multimedia and programming content, handle and enforce intellectual property rights and user licenses;
4. Security: personal protection, data protection, digital identity protection, security measures, safe and sustainable use;
5. Problem solving: to identify digital needs and resources, make informed decisions about the most appropriate digital tools according to purposes/needs, solve conceptual problems through digital media, solve technical problems, use technologies creatively, update one's own and others' digital competency.

From this perspective, it is important to recognize initiatives such as the Center for Technologies and Distance Education of the Federal University of Ceará Medical School (NUTEDS) and the Telemedicine University Network (RUTE), which are aimed at promoting the development of digital competency as well as digital and informational literacy among health care professionals and students, from the undergraduate level onward[5].

In addition, nursing proposals that emerged from the IV National Graduate Studies in the Health Sciences Meeting, in 2010, which are:

1°) encouraging the creation of technological and innovative environments to develop nursing and health care models, with sustainability and entrepreneurship strategies;

2°) investing in the creation of economic and social impact indicators as well as technology and innovation in nursing and health;

3°) promoting the creation of networks for innovation and technology development in nursing and health, to ensure excellent and safe nursing care;

4°) proposing, to the development agencies, thematic projects of the Technology and Innovation in Nursing Care, Management and Education and Health, in accordance with the policies of the Unified Health System;

5°) proposing the inclusion of nursing care technologies in the Priority Research Agenda; and

6°) Increasing the policy of expansion and articulation of Nursing Postgraduate programs, as a strategy for qualifying service professionals with the implementation of evidence-based care technologies[6].

As changes are already underway, the challenges in the field of nursing are not insignificant., and it is not enough to just follow along with the transformation. It is necessary to invest in research efforts in order to understand how ICTs will affect the care, organization and coordination of nursing services, in addition to propose and test educational and management models that enable nurses to act in these new situations.

Lúcia Marta Giunta da Silva
Associate Professor and Coordinator of the Undergraduate Nursing Program from Escola Paulista de Enfermagem da Universidade Federal de São Paulo (EPE-Unifesp) – São Paulo (SP), Brazil

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