

Accessibility in scientific journals: beyond a necessity

Acessibilidade nos periódicos científicos: para além de uma necessidade

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In a broad democratic concept, in recent years, science has been consolidated through a movement whose premises are free, inclusive and accessible access for all, the so-called Open Science movement, thus allowing society to participate in and benefit from the scientific discovery process. Despite this, structural challenges in the scientific dissemination process end up creating disparities in access to content by people with disabilities. In this way and based on our mission, since 2022, the Online Brazilian Journal of Nursing (OBJN) has been implementing strategies to break down these barriers, thus aiming to get increasingly closer to the concept of "Science for All".

According to Article 8 of Federal Decree No. 5,296/2004, accessibility is characterized by the condition for safe and autonomous use, total or periodic and by people with disabilities or reduced mobility, of spaces, furniture and urban equipment, in addition to buildings, transportation services, devices, systems and communication and information means⁽¹⁾. In this way, making something accessible goes far beyond a necessity, as it is a matter of human rights.

Before the migration from physical to digital media, access to science by the general population was quite limited. According to Gardner, Bulatov and Kelly⁽²⁾, it was computers that revolutionized access to information, especially for blind people or for those who have severe visual impairments⁽²⁾. Before digitalization, access to printed information was based on human intervention, which allowed making this information available to people with visual impairments⁽²⁾. With technological advances, information began to be read by automated programs, which allow voice reading or translation into Braille, guaranteeing greater autonomy to its users.

Unfortunately, much of the electronically distributed scientific literature still cannot be read properly by screen-reading programs, especially involving images⁽³⁾, with few websites adapting their content to include blind people. This reality also afflicts individuals with other sensory and/or mental limitations, as an inadequate design, for example, can lead people with dyslexia to have difficulty reading a website⁽⁴⁾. In this way, the scarcity of adapted materials turns reading into a challenge for these people, who have impaired access to information, being conditioned to those (few) items adapted to their limitations⁽⁵⁾.

By digitally excluding this population, we are depriving them of their participation in society, as the main economic, governmental and cultural activities take place in the digital environment. Thus, making something accessible online is "providing equal access and opportunities for people with disabilities"⁽⁶⁾. For this, it is not enough for the content to be available online; it is necessary to identify the barriers that prevent its effective use by different groups of individuals, seeking to eliminate them⁽⁷⁾.

The right to access and use science must be ensured for the entire population, and accessibility is crucial to guarantee that science is a force used for the good of all and not just a few. In this context, the Committee on Publication Ethics (COPE) recognizes accessibility, diversity, equality and inclusion as essential aspects to be promoted and applied to all the content of scientific journals. In this way, journals have a responsibility to make efforts and ensure that their content is as accessible as possible, respecting the Principles of Transparency and Best Practices in Academic Publishing⁽⁸⁾ and human rights.

In this sense, for some years now, OBJN has reinforced its search for the adoption of assistive technologies that guarantee the accessibility of people with disabilities to the scientific production that it makes available in the Nursing area. Assistive technologies are products, devices or strategies that aim at promoting functionality correlated to the participation of people with disabilities, stimulating their autonomy, social inclusion and quality of life⁽⁹⁾.

Among the measures adopted in recent years are: the inclusion of the VLibras plugin for hearing impaired people, and the high contrast and letter enlargement tool through the accessibility icon, facilitating visualization by people with low vision. In addition, with the changes planned for 2020⁽¹⁰⁾, all articles are now available not only in HTML and PDF formats, but also as EPUB, facilitating the use of screen readers by blind people.

In mid-2022, aiming to expand the inclusion strategies for all audiences, OBJN incorporated something new to its website: the implementation of audio descriptions in the abstracts of all its published articles. In this way, when opening the abstract page, authors and readers alike can hear them before even consulting the entire article. This technology can help not only blind people but dyslexic individuals and the general population, facilitating reading.

OBJN values the inclusion of all audiences in the scientific field; thus, in order to promote its role as a scientific dissemination means and its mission towards society, it undertakes to always seek to expand the assistive technologies available on its website, making available audio descriptions for all its content, descriptive notes on images of articles and videos on social networks throughout 2023. By 2024, it will be proposed to include a Libras translator in the videos published on social networks.

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