The Future of Eye Care

The year 2023 witnessed a significant impact of machine learning (ML) and artificial intelligence (AI) algorithms on eyecare services. These technologies are becoming increasingly ubiquitous in high street clinical practices around Northern-Europe. As we move forward, there is no doubt that such algorithms will play major roles in first-line vision- and eyecare provided by optometrists and other professionals. While the potential of ML and AI will be immensely useful, it is imperative to recognize and address its limitations. This emphasis on understanding both the utility and constraints of ML and AI was a central theme at the 15th Kongsberg Vision Meeting, the abstracts of which are published in this issue (Baraas & Falkenberg, 2023).

The efficiency gains offered by ML and AI, such as those aiding refraction in a busy practice are apparent, but failing to see the limitations and addressing this in an appropriate manner may have consequences for individual patients. The inherent bias in any algorithm is something that requires understanding and thought. It raises the ethical bar for eyecare professionals and practice. In our commitment to advancing patient care, it is crucial to continually evolve bachelor- and master-degree programs to stay attuned to the dynamic landscape that will be shaped by ML and AI in the future. Additionally, eyecare providers in clinical practice should have access to research-based knowledge both in written and oral form that will foster interactive discussions.

To bridge the gap between research and practice, SJOVS introduced “The Optometry Hour” webinar in Norway. This one-hour online session features two 15-minute presentations by first-authors of two papers published in SJOVS, aimed at vision- and eyecare professionals in clinical practice. The presentations are followed by an open discussion related to the clinical significance of the presented papers and reflections on how this can aid development of evidence based clinical practice. The choice of Norwegian as the presentation language removes the language barriers and facilitates efficient knowledge translation of research to clinical practice. Having conducted two successful webinars in 2023, our intention is to continue this initiative in 2024, and to translate the concept to other countries and languages.

We encourage researchers, eye care professionals and related professionals to submit their work to be considered for publication in a SJOVS standard issue. If accepted, manuscripts will be included in the online collection of the given special topic. The latest special topic is announced in this issue of SJOVS, and this is: vision and stroke. The special topic editorial on vision and stroke screening is authored by guest editor Associate Professor Torgeir Solberg Mathisen and the SJOVS Associate Editors Helle K. Falkenberg and António Filipe Macedo (Mathisen et al., 2023).

Unfortunately, there are many individuals who have never had an eye exam and who are unaware that they may have a vision or eye health problem. This is a concern not only in developing countries, but also in Northern and Western Europe. Visual acuity charts are still by far the most ubiquitous tool for screening for vision and eye health problems. Jaffray et al. (2023) have compared the Arclight Cloth Chart (ARCchart) to the gold standard ETDRS chart for visual acuity. In this issue you can read more about the use of this, and how it may prove to become a valuable low-cost tool for testing visual acuity in resource-poor settings.

We are nearing the end of 2023, and we are all hoping for the world to be more peaceful in 2024. The SJOVS editorial board wishes everyone Happy Holidays and a Happy New Year.

References


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