

Transformation of Education and Medical Practice in the Era of Artificial Intelligence and Public Health

We are pleased to present the third issue of the CIE Journal of Educational Research of the Faculty of Medicine of Tampico “Dr. Alberto Romo Caballero” at the Autonomous University of Tamaulipas. This volume reaffirms the journal’s mission as an academic forum dedicated to the dissemination of relevant scientific research in the field of education, through the publication of studies and scholarly reflections that address contemporary challenges arising from technological integration, competency-based training, and the health needs of the population.

Contemporary medicine is undergoing a process of structural transformation driven by the convergence of technological innovation, the evolution of educational models, and the imperative to strengthen public health through preventive and evidence-based approaches. Within this context, the contributions included in this issue examine how artificial intelligence and emerging pedagogical frameworks are redefining medical practice.

One of the central themes identified is the critical review of traditional models of medical education. The analysis of self-perceived competencies in mechanical ventilation reveals significant gaps between theoretical knowledge and practical capability, underscoring the need to strengthen educational strategies focused on the development of clinical competencies.

The incorporation of methodologies based on simulation, experiential learning, and objective assessment is presented as a viable alternative to enhance patient safety and the quality of medical care.

These strategies align with international standards and promote training that is consistent with the real demands of healthcare systems.

In parallel, artificial intelligence emerges as a disruptive factor in diagnosis, prediction, and clinical decision-making. The studies included demonstrate its potential to improve diagnostic accuracy and optimize risk stratification, while simultaneously emphasizing the need for ethical integration and rigorous methodological validation.

In the field of public health, findings related to community understanding of cervical cancer reveal limitations in exclusively biomedical strategies. The persistence of knowledge gaps reinforces the importance of contextualized educational interventions and effective health communication.

Likewise, the clinical reviews featured provide a comprehensive understanding of the health–disease process. The analysis of chronic kidney disease associated with hepatitis C highlights its pathophysiological complexity and the need for multidisciplinary, evidence-based approaches.

Finally, digital applications aimed at promoting healthy lifestyles illustrate the potential of technology as a tool for population-level intervention. Taken together, this volume reflects a transition toward an integrative medical paradigm that brings together education, technology, and social responsibility in support of global health.

Sincerely
Dra. Miriam Janet Cervantes López
Editor in Chief