



Editorial

Epistemology of evidence: rigorous science and global impact in the context of emerging health realities

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Epistemología de la evidencia: ciencia rigurosa e impacto global desde las realidades sanitarias emergentes

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The generation of scientific knowledge in the field of health sciences is currently facing a profound epistemological debate. The empirical tradition, a fundamental pillar of medicine and public health, is undergoing a metamorphosis in which isolated clinical data loses its heuristic validity if it lacks a robust methodological framework, rigorous synthesis, and an analysis of structural equity. At our institution, we conceive of research not merely as the documentation of biological or epidemiological phenomena, but as an emancipatory tool and a means of advancing scientific sovereignty for critical decision-making within our healthcare system.

This issue of the ALERTA Scientific Journal faithfully embodies this commitment. Methodological rigor is evident, ranging from meticulous clinical observation to macro-level conceptual reviews that integrate clinical and social medicine. In the realm of primary epidemiological reporting, case reports remain at the forefront of early medical alert systems. An example of this is demonstrated by the utility of Hoagland's sign for the early diagnosis of infectious mononucleosis in pediatric practice, a fundamental reminder of the value of classical clinical signs. Complementarily, therapeutic innovation based on local and specific molecular mechanisms is becoming firmly established cutting-edge approaches, such as the topical use of interferon

alfa-2b in squamous cell carcinoma of the ocular surface, and the clinical-diagnostic characterization of conditions resulting from severe trauma, such as Purtscher's retinopathy following neurotraumatic events.

The rigor of evidence-based medicine requires reconciling the meticulous observation of emerging clinical syndromes with an analytical understanding of the social, metabolic, and structural determinants that shape community health.

However, contemporary health science would be fruitless if it ignored social determinants and the erosion of its own human and social fabric. The original research in this issue offers a reflective perspective of high social and health value by preserving the methodological and historical record of nursing staff's experiences in caring for COVID-19 patients at facilities under El Salvador's Ministry of Health. This qualitative systematization exercise highlights the strategic role of leadership and structural support in situations of extreme crisis. At the same time, the epidemiology of vulnerable populations is urgently addressed through brief communications that outline the factors associated with the prevalence of overweight and obesity in children under 35 months of age nationwide, as well as the epidemiological and clinical profile of pregnant women diagnosed with anemia in the eastern region of the country, specifically at the San Miguel National Hospital.

Both studies reaffirm the urgent need to base clinical practice guidelines and metabolic-nutritional interventions on locally relevant evidence, a goal that will be further strengthened once the second National Survey on Chronic Noncommunicable Diseases, currently underway, is completed and provides new indicators.

The featured article is "Factors associated with major depression in Salvadoran adolescents". Furthermore, this issue of *ALERTA* stands out for its theoretical depth, as demonstrated through a series of narrative and conceptual reviews of high academic caliber. It is imperative to focus on the critical analysis that links the intersections between hybrid violence, public health, mental health, and therapeutic justice; this interdisciplinary approach is essential for addressing the complexities of the contemporary social environment. No less important is pre- and post-surgical clinical

optimization, which is evaluated based on the metabolic effects of whey protein on tissue recovery in surgical patients, and the comprehensive impact of breast reconstruction on the daily lives of oncological patients, reaffirming a humanized and equitable vision in modern medicine. Finally, this issue features cutting-edge reflections ranging from the physiological paradigms of brain resuscitation and their analytical discussions on the boundary between life and death, to pragmatic solutions such as the effects of prophylactic medications on migraines in children and adolescents compared to a placebo.

We invite the medical and academic communities, especially researchers, to delve into these pages, confident that the knowledge presented here meets the highest standards of the scientific method and serves as a solid stepping stone toward excellence in the health of our population.