

Covid-19: An opportunity to reflect on evidence-based practice

Uma oportunidade para refletir sobre a prática baseada em evidências

Covid-19: una oportunidad para reflexionar sobre la práctica basada en evidencias

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An outbreak of pneumonia, often associated with fever, dry cough, fatigue and occasional gastrointestinal symptoms, in a Chinese city, involved approximately 70% of workers in a seafood market in December 2019.¹ At that time, an epidemiological alert was issued by the local government and later, in March 2020, the World Health Organization declared a pandemic by SARS-Cov-2. Several resources were mobilized for the provision of care to patients, in addition to the implementation of social distance measures and profound changes in the life activities of each of us, in order to reduce the spread of the virus and limit the impact on health systems.²

Measures to mitigate the spread of the virus have changed over the past few months. Laymen in public places were not recommended to use face masks until a second time, for example. This resulted from the deepening of scientific knowledge about the virus, the ways of transmission, the recognition of those most at risk and the outcomes for patients. During that time, we live with the suffering of patients and families, in addition to the superhuman work of health care providers.³

The search for researchers for effective treatments and care for patients affected by the infection has been tireless. It seems evident to us, even among the general population, the need for quick responses from science to solve this specific health problem. This search can be compared to Evidence-Based Practice (EBP).⁴

EBP can be defined as the conscious, explicit and judicious use of the best and most current scientific evidence, combined with clinical experience and patient preference, for the provision of health care.⁴⁻⁵ Thus, EBP seeks not only to encourage health professionals to use scientific evidence for the provision of care, since we assume that this has been done routinely by them, but to define what constitutes acceptable evidence, that is, that meets scientific standards, in contrast to the evidence considered clinical and/or personal.⁶

The term EBP was coined from the work developed by Dr. Gordon Guyatt, in the 1990s, during his teaching activities in the medical residency course at McMaster University, Canada.⁷ Additionally, several advances were necessary for the advancement of EBP, such as the refinement of epidemiological analysis methods and the incorporation of software to carry out statistical analysis. In addition, epidemiologist Dr. Archie Cochrane (1909-1988) published criticisms of the British medical profession due to the absence of rigorous standards for health decision-making and excessive clinical freedom, which exposed patients to procedures with little or no efficiency. His work culminated with the founding of the Cochrane Collaboration, an international network that seeks to direct the provision of health care guided by high-quality scientific evidence.⁶

Despite wide acceptance, there are severe criticisms of EBP. Currently, EBP is supported by results of systematic reviews of scientific literature and meta-analyses. The meta-analysis process synthesizes the results of multiple studies that addressed a specific topic. It is not just a matter of collecting the results of several small studies that tested a given intervention; the meta-analysis employs statistical methods to integrate the various results into a single value - the measures of effect - in addition to providing a synthesis of the available evidence on the subject under study.⁸ However, in the process of selecting and including the primary studies that provide data for performing the meta-analysis, slight differences in the designs may be lost in an attempt to gather enough data to perform the calculation.⁸ Thus, in this procedure, the reviewer can include results from studies in which patients have undergone slightly different procedures and, thus, compare results considered incomparable.⁸

Another criticism of EBP deals with the reduction of the freedom of the health professional in clinical decision-making, since care will be increasingly guided by guidelines based on scientific evidence. This is common among those concerned with the relationship between epidemiological data resulting from meta-analyses and their significance to patients, individually. However, the accumulation of experiences in providing evidence-based care has provided greater security for these health professionals.⁹

The United States National Academy of Medicine established that by 2020, at least 90% of clinical decisions would be based on up-to-date scientific evidence.¹⁰ Given the importance of EBP in health care provision scenarios, there is a great movement for the inclusion of the theme in the curricula of undergraduate courses for health professionals, which includes strategies for teaching and learning methods for obtaining and critically evaluating health care scientific evidence.¹¹ However, according to Guyatt et al.,¹² only the training of professionals focused on EBP is not enough for the assistance to be based on scientific evidence. The interrelationship of several characteristics, such as the development of skills to assess the quality of scientific evidence, and their implications require intensive study, which often requires a lot of time. In

addition, some professionals do not have the desire to develop advanced skills for the evaluation of scientific evidence and health facilities do not have the necessary resources to implement EBP, which can negatively impact its implementation.

Thus, in addition to the training of new professionals qualified for the development of critical reasoning aimed at PBE, Melnyk et al.⁴ declare that joint efforts are necessary; for example, the establishment of EBP as a policy in health systems, the training of institutional managers, the training of trained professionals and specific financing so that health services are able to provide the necessary conditions for the provision of scientific evidence-based care.

Therefore, it seems appropriate to highlight that all health professionals, managers and researchers must address this method in order to incorporate it into clinical practice. As a result, it is expected to reduce regional divergences in the provision of care, increase the quality of health care and optimize the use of financial resources for the health area, in addition to respecting the preferences of users of health services.⁵ These aspects would have a positive impact not only in the current Covid-19 pandemic scenario, but in all clinical treatment approaches.

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