

Safe and effective praxis without scientific evidence: is it possible?

Práxis segura e eficaz sem evidências científicas: é possível?

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The earliest accounts of scientific thought date back to thousands of years BC, where problems in the daily lives of our predecessors led to the search for effective and replicable forms of resolution. Nowadays, in the advent of science and technology, health professionals' decision making has been organized based on the analysis of the diverse evidence available in the scientific literature. This process has been identified Evidence Based Practice (EBP).

EBP originated in Canada around the 1980s. It emphasizes the use of research to guide clinical decision making [1] in order to provide the patient with the best treatment and to avoid iatrogenesis. However, for EBP to work, health professionals are required to critically analyze the available scientific literature. This analysis involves aspects such as the observation of the study designs, identification of possible methodological biases, analysis of the applied statistics and the similarity between the study population and the one to be treated [1]. But when is the existing evidence insufficient?

Sometimes, given certain clinical situations, health professionals do not figure out clear and forceful answers in the scientific literature. We, who advocate for Cardiovascular Rehabilitation, are often supported by a vast literature that helps us to make safe and effective therapeutic decisions. However, we come across cases where we do not get this support. We recently received a case of Ebstein Syndrome and a non-Ischemic Ventricular Aneurysm case in our clinic. Two cases in which the scientific literature is scarce and almost nonexistent in the prescription of physical exercise. So, we come across questions like: Is there any contraindication regarding the practice of exercise in these cases? What is the benefit of exercise for these patients? What should the exercise prescription be for these patients if there is no contraindication?

Faced with such pictures, we ask - how to proceed? In such situations, resources can be valuable biological rational and accumulated practical practice. The biological rationale is grounded in a vast and long knowledge of the core disciplines

in the field of exercise. The disciplines of histology, anatomy, kinesiology, physiology, pathophysiology, and exercise physiology are essential for practitioners who use physical exercise as our therapeutic resource health promotion. Therefore, note that it is impossible to acquire this knowledge in a short time. This is a continuous and often arduous process that must be perpetuated throughout our professional journey. In the examples we cited, we could only decide because we had the basic knowledge to infer answers to the questions that arose before the cases in question. We did not have the time to review all the background literature for a later therapeutic decision. The knowledge accumulated through constant improvement has enabled proper scrutiny.

Unfortunately, few students and professionals understand the importance of continuing qualification. This culminates in improper therapeutic decisions that place a burden on patients, institutions and governments because they are sometimes ineffective, sometimes harmful. Even when it is possible to exercise EBP, it is necessary that there are professionals with leather knowledge and who are in a permanent intellectual growth to apply it. Just as there is no biological rational decision-making without consistent reasoning, there is no EBP performed by professionals with poor knowledge.

The second aspect, experience, is a virtue acquired during time. Exposure to practice improves judgment because it allows us to accumulate experience that will inform future decisions. When we encounter rare cases, such as the ones we mentioned earlier (Ebstein's Syndrome and non-ischemic ventricular aneurysm), previous or unsuccessful experience guide the conduct of a new case with the same problem. Even with the inherent peculiarities, previous similar cases generate important support in the adoption of future therapeutic decisions.

That is why we consider it so important to share experience among professionals, whether at congresses, symposiums or expert meetings. Perhaps, for a short time, this is an uncommon practice. A good solution for this is sharing experience by publishing case reports in scientific journals. Professionals should be encouraged to record and report on their experience. A case report can serve as a basis (practical biological rationale) for other professionals facing a similar situation, as well as for compelling and cause-effect observational studies that will one day be the basis of EBP.

Finally, in response to the title of this article - yes, it is possible to exercise safe and effective praxis even in the absence of scientific evidence supporting the treatment. However, whether for the exercise of EBP, or for treatments based on biological rationale and practical experience, it is necessary not to forget the need for coexistence of professionals who excel for a profound knowledge and renew themselves in continuity. Therefore, we invite your student or professional, to put another brick in the construction of your knowledge, with the careful and critical reading of this new edition of *Brazilian Journal of Exercise Physiology*.

References

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