

Mitigating errors and advancing towards excellence!

Mitigando erros e avançando rumo a excelência!

Marvyn de Santana do Sacramento^{1,2,3,4} , Manuela da Silva Moura² , Pedro Elias Santos Souza^{1,3,5} 

1. Actuscordios Reabilitação Cardiovascular, Salvador, BA, Brazil

2. Centro Universitário Adventista do Nordeste, Capoeiruçu, BA, Brazil

3. Escola Bahiana de Medicina e Saúde Pública, Salvador, BA, Brazil

4. Universidade Salvador, Salvador, BA, Brazil

5. Centro Universitário Social da Bahia, Salvador, BA, Brazil

Errors made by healthcare professionals are among the top 3 causes of death in the United States [1]. The term “medical error” is attributed to failures in judgment, diagnosis or in relation to the execution of techniques by any member of the health care team. Thinking about the beginning of another cycle of our Brazilian Journal of Exercise Physiology and the importance of professionals who work with physical exercise for health promotion, we will discuss some crucial points about decision-making.

As a scientific journal, one of our pillars is our commitment to the dissemination of true information. Corruption of knowledge can support wrong thoughts and decisions, for which the final outcome will be damage with exponential manifestation. On the other hand, the reader is responsible for a critical and profound reading, in which a deep knowledge of science [2] and fundamental aspects of his/her specialty are involved.

In possession of the directions mentioned above, we will find ourselves more able to formulate the exercise prescription. On this subject, we would like to categorize some prescription models and warn about their characteristics, potential risks and benefits. The first category we will name as subliminal prescription. In this, the application of exercise offers low overload, which reduces the risk of intercurrentence as well as limits the benefits to improvements of little clinical relevance.

In another aspect, we have the generalist prescription, in which there is the use of evidence available in the literature, however, the work method is applied to the patient. In this way, the prescription used in the research is transmitted to the individual. This strategy has a good chance of benefiting the patient as it has already been tested in larger groups. However, there is a high risk of intercurrentence if the patient's clinical condition is more severe than that presented in the studies.

In another aspect, we have the generalist prescription, in which there is the use of evidence available in the literature, however, the work method is applied to the patient. In this way, the prescription used in the research is transmitted to the individual. This strategy has a good chance of benefiting the patient as it has already been tested in larger groups. However, there is a high risk of intercurrentence if the patient's clinical condition is more severe than that presented in the studies.

Finally, we arrive at the individualized prescription, in which the knowledge available in the scientific literature and idiosyncrasy are used as support to determine an assumption. When proving an intervention to be beneficial, we adapt the prescription to the patient's clinical condition. In this case, when correctly modulated, the individualized prescription is capable of generating results superior to those reported by research. To carry out such adaptations, the professional must have extensive knowledge about research and exercise physiology, otherwise, the risk will be even greater when we think of adapting the protocol with increased loads and intensity of effort.

May the science and physiology of exercise continue to be the lights that guide us through the darkest of nights.

References

1. Makary MA, Daniel M. Medical error-the third leading cause of death in the US. *BMJ*. 2016 May 3;353:i2139. doi: 10.1136/bmj.i2139. PMID: 27143499.
2. Sacramento MS, Sousa JVL, Andrade AM, Petto J. Base em evidências ou preferências? Um guia para a assertividade na tomada de decisões. *Rev Bras Fisiol Exerc* 2020;19(5):332-335. <https://doi.org/10.33233/rbfex.v19i5.4415>

