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EDITORIAL

Dissecting current scientific evidences

Dissecando as evidências científicas atuais

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Scientific evidence has become the safety basis for diagnostic and therapeutic choices for our patients. There is no question that methodological advances make clinical practice much more reliable, and the more controlled is the study, the higher the reliability of its results. Investigators are competent characters, neuter observers who should not tend to confirm or deny the hypothesis, and who look for explaining observed phenomena. This is the expected ethical behavior. However, it is necessary to explain the clinical practice taking into consideration what is considered scientific advance, as well as implications of the use of population samples in the management of painful individuals.

Although general and professional common sense considers that science looks for the truth, this is not an idea endorsed by scientific trends of the last century. By the way, as from the moment where perception of reality is conditioned to a subjective "me", as from Descartes, and that nothing more can be evaluated except appearances, the discoveries of which refer to themselves and not to the supposed inaccessible reality, as in Kant, it is natural the understanding that scientific truth is not accessible, making scientific development a consensus about theories which are periodically replaced by a kind of revolution (Thomas Kuhn). So, evidence is not a truth about facts, but rather a theory about appearance, waiting for the next revolutionary proposal.

Also in the last century, positivism was a factor promoting strong technological development, although limiting aspects which could be or not studied by science. It is possible to address psychic and spiritual factors in a scientific manner; but in practice, what is observed in international contexts and worldwide recognized congresses is the valuation of materialist and reductionist aspects even in the emotional approach of pain, which has made it just a behavior, and nothing more. So, we have evolved a lot on what we know about appearance of phenomena, but there are factors considered inaccessible which are determinants in painful patients and which have to be accepted as research problems for the advance of the real understanding of what goes on with individuals.

It is necessary to understand patients to treat them in a tailored way. However, studies with highest scientific value are those with larger samples, resulting in significant, however generic and not always generalizable data. For such, scientists have to use inclusion and exclusion criteria which make that group less representative of general population, or samples become more realistic as ewer are such criteria, although the understanding of observed associations is complicated to the point to question observed findings, thus using logic as resource. So, a lot can we know about the appearances of what we observe, but we are increasingly far away from the unique individual, singular combination of the patient coming to our office.

Evidences are discussed and readers need to know what they really represent today. In practice, many believe in the dogmatic belief of published evidences, which may or not be accepted in the future and which may soon be replaced by some other news. These evidence scientists are not skeptical, quite the opposite. They remain skeptical just with regard to contents with materialist and reductionist philosophy which does not allow investigation, an analytical and logic rhetoric reinforcement apart from the phenomenon itself.

Going beyond, if the method is reliable and the hypothesis may be questioned, how to explain the very significant statistical difference between published articles with positive results (which have proven the hypothesis) as compared to the very low frequency of articles with negative results (refuting the hypothesis)? What we see in practice is the lack of interest on part of scientific journals when results are not what was expected, in addition to resistance to results of impeccable, although innovative, methodology which make data we call scientific evidence worth a methodological approach by themselves to understand such biases.

The study of pain is a scientific field daring to revolutionize these barriers when raising questions such as quality of life, emotions and alternative therapies for research and evidence. It is possible to produce high quality results in these areas which shall allow adding future clinical knowledge and benefit.

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