A broader perspective of iatrogenesis

As is well-known, the etymological meaning of “iatrogenesis” refers to “caused or brought forth by a healer or physician” (from the Greek *iātros*: physician and *gēnesis*: creation). It involves all health care providers working in health sciences, physicians, nurses, psychologists, pharmacists, physical therapists, dentists, etc.

It is well known that iatrogenesis is considered to occur when the action of a physician causes damage in highly risky situations for the patient, but that is not always like this. I will deal with this aspect to reflect on what can happen in the different and multiple aspects that are part of health care.

The medical act refers to the actions we take as physicians in the course of our professional practice, including everything we do while seeing our patients. Sometimes, actions are very complex, not only in terms of scientific knowledge but in relation to how we behave when dealing with our patients and their parents. These may go from seeing a patient, providing therapeutic indications, performing a procedure, to making a wrong diagnosis, among others.

Therefore, it is necessary for us to reflect on whether the use of the term “iatrogenesis” invariably refers to causing damage through highly risky actions. These are preventable damages, which may occur as a result of many of our actions, not only when the risk is obvious.

Currently, there are at least two aspects contributing to the evident, progressive deterioration of medicine. First of all, mercantilism, which has been present for several years and is turning increasingly overwhelming. For a certain group, this is the top priority, making many of those involved in health care look for profit above all. Mario Bunge, an Argentine philosopher living in Canada, pointed out why this is incompatible with medicine: *“Health is too important to be left in the hands of companies or individuals whose main goal is profit, because profit has no limits.”*

If we take into account that *iatrogenesis* means an action “caused or brought forth by a physician”, it may be observed in many situations that are part of everyday health care practice that bear no special risks. A clear example of one of the most unfortunate behaviors in current clinical care includes outpatient visits and the information provided by physicians to patients, parents and close relatives emerge clearly.

The adverse and negative changes in these behaviors were difficult to imagine many years ago, when what is known as the “golden age of medical practice” started towards the end of the 19th century and the early 20th century. To a large extent, this was achieved when physicians understood that, first and foremost, they had to stop indicating ineffective treatments that did not heal but, on the contrary, had severe consequences, including death. Thus, physicians started to listen to their patients unhurriedly, to perform a detailed physical exam, and to practice their empathy, so their patients could regain their health. This way, they managed to earn people’s trust while at the same time they progressively gained more respect.

Today, an office visit lasts only a few minutes, patients are hardly listened to, and instead of paying attention and establishing a dialog with them, physicians rush to order lab tests and imaging studies, which most of the times are unnecessary. Such exaggeration in the use of diagnostic methods may also be the result of scarce knowledge, an intolerance to uncertainty or the search for profit, but most of all it is because office visits are brief and physicians do not listen to their patients, as well as the mistaken belief that a greater use of technology will provide a better, “more modern” medical care.

Undoubtedly, such regrettable behavior is one of the most common examples of iatrogenesis because it may be harmful.

Another iatrogenic action is one that causes evident lapses in communication with hospitalized patients, who are undoubtedly in a critical situation and need to trust physicians more than ever. An adequate clinical judgment, founded on knowledge, intuition and other attributes, they are based as our always remembered teacher, Dr. Carlos Gianantonio, M.D., used to say: *“...accompanying, helping, comforting, healing... maybe.”* To maintain such attributes, it is necessary to listen to and talk with patients, and this is part of a different technology, one that is understood as the language typical of the art of medicine. Most likely, and to a large extent, this is the result of the absence of communication during our training, either at the university or the medical residency program. This is regrettable because communication is much more important than

many other things that we were taught and which have proved worthless.

Another aspect of iatrogenesis is that of critical care in severely-ill children. This represents a big challenge in pediatricians' road towards reaching an indispensable aspect of our practice: accompanying and helping children and their parents. It is not unusual to see pediatricians willing to communicate adequately with parents, but when they have to face a dying child, they find it very difficult and intolerable to deal with the inevitable fatal course of that child, their patient. If this continues, it has been observed that sometimes physicians start missing meetings with the parents and the child, thus slowly distancing themselves until they stop seeing them at all, right at the time when they are needed the most. It is shameful to point out that such damage will affect both parents and pediatricians.

Finally, I will discuss the case of iatrogenesis caused by health care providers' errors, which are highly frequent. However, many of these errors do not reach patients and are known as "quasi-errors" and therefore cause no harm, but those that do bring forth a preventable damage are a majority and affect patients, parents, and families.

Multiple errors occur in hospitalized patients, especially medication errors, which are three times more frequent among hospitalized children than adults, most of all in neonatal intensive care units. Other type of errors are procedure errors, which include those made during surgery –which are common–, a misdiagnosis, an incorrect treatment choice, the misuse of catheters for different administration routes (intravenous, intrathecal, feeding, subcutaneous), the indication of treatments or tests to a different patient, among others.

An important aspect associated with errors refers to the multiple failures in hospital systems, which are usually the main cause of a mistake made by a person (the "human factor"). Likewise, errors made by health care providers may be the result of negligence, lack of experience, recklessness or patient neglect.

Without a doubt, errors made during patient care are the ones that cause more damage, resulting in severe adverse events. These are called "sentinel events" and lead to death or irreversible damage. The vast extent of these errors leads to high mortality rates, as observed in the United States of America, where they are the third cause of mortality, i.e., approximately 400 000 annual deaths are caused by errors.

These considerations about the presence of iatrogenic events in current medical practice point out their variability and that they are not only present in situations that pose a risk for the patient.

José M. Ceriani Cernadas
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