Medical mistakes and their absence in medical schools

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Abstract

Medical mistakes are any unintentional acts which are detrimental to patients' health, most of which have multiple causes or arise from the complexity of modern healthcare systems. Since no medical specialty is free of mistakes, training is needed beginning in undergraduate school to learn how to deal with them. **(Acta Med Colomb 2022; 48. DOI: https://doi.org/10.36104/amc.2023.2522).**

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Introduction

Medical mistakes are defined as the "failure of a planned action to be completed as intended (an error of execution) or the use of a wrong plan to achieve an aim (an error of planning)" (1).

The report *To Err is Human* estimated that 44,000-98,000 deaths occurred per year due to medical mistakes in the United States. This showed the need to implement patient safety programs throughout the world (2). However, years later, Makary et al. estimated that up to 251,454 deaths occurred in the United States in 2013 due to medical mistakes, constituting the third cause of death in the country (3).

According to data from the Centers for Disease Control and Prevention in Atlanta, the most frequent medical mistakes include iatrogenic effects of medications and unnecessary surgeries. Also, deaths due to medical mistakes have been found to be largely underreported, as the International Statistical Classification of Diseases and Related Health Problems, also known as the International Classification of Diseases, has few diagnostic codes linked to medical mistakes. Current research has shown that factors like faulty judgement, communication failures, diagnostic errors and lack of skill are the most common causes of patient death worldwide (4).

Diagnosis as the cornerstone

The term "diagnosis" is derived from the Greek *diagnostikós* and means "different, something that distinguishes," derived from *diagignóstkein,* "to distinguish, discern," derived in turn from *gignóskein,* "to know" (5). In considering the various links in the clinical exam, this one rises above the rest because it is the basis for the physician's activity, and at the same time one of the most important points of the medical act, and will be the initial act in the professional's relationship with the patient, with the goal of identifying the causes of the illness affecting him/her.

As previously explained, the selection of appropriate treatment will arise from an accurate diagnosis, to then reach another key step in the patient's care, which is to provide him/her with an explanation of the disease or condition that is affecting him/her. These steps could be extrapolated to a machine with various gears which begin from the point at which the patient first contacts the professional and end with discharge, noting that any tiny failure in this process could lead to a wrong course of action (6).

Ever since the first study on medical mistakes in diagnosing illnesses was published in 1912, some of these were noted to be common, even for the most experienced clinicians of their times. This is not surprising, since medicine treats human beings who have many interpersonal variables which occasionally make it hard to predict the evolution of any disease (7).

There are many complex mechanisms involved in the origin of mistakes, which can at times deceive even the most audacious clinicians, who only on autopsy are able to discover the reason for the patient's demise. Consequently, new measures have been taken, such as the use of clinical practice guidelines, scales and algorithms (8). D

However, a meticulous history and physical have proven to still be the main links in decreasing diagnostic errors. Thus, errors are often made during medical history taking, which is an important part of the clinical exam, since in 56-75% of the cases it ensures the ability to frame a correct diagnostic impression, and it provides the opportunity to establish a doctor-patient relationship which will promote successful medical care (9).

The role of the physician

Making a diagnostic mistake may not be the physician's fault, as medicine is as uncertain as it is variable, and these

errors are therefore often inevitable. In addition, as previously explained, even with today's technology, there are cases that are only cleared up with an autopsy. It should also be noted that all the paraclinical tests considered useful for changing the course of action should be used, as not doing so would constitute negligence.

However, it is hard to determine responsibility in cases of medical mistakes because it involves a strictly technical field, which complicates the judicial concept considerably. Diagnostic errors involve professional responsibility when they reveal inexcusable ignorance or arise from insufficient study, due to not having applied the basic *lex artis*. For example, there is responsibility when the physician has not made an effort to discover the true nature of the disease when the patient has clear and common signs and symptoms (10).

Burnout syndrome

Defined by Molina (2007) as the paradox of health care, as the physician becomes ill while healing his/her patients, this syndrome has grown due to the SARS-CoV-2 pandemic which has saturated most healthcare systems around the world. This has resulted in an overload from high energy requirements, occasionally manifesting as distancing from the person being treated, which, under certain circumstances, has given rise to medical mistakes (11).

Conclusions

Understanding the repercussions, we must, as a medical collective, consider whether undergraduate preparation is enough to recover from this type of catastrophic events which, leaving out the patients' sequelae, may have an effect on the professional which is hard to fully appreciate.

Thus, the topic of medical mistakes must be addressed more in the medical classrooms so that future professionals have the tools to deal with it from all angles, both psychological and legal, as it always is and will be a taboo topic.

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To my wife, Mary Luz Zuluaga.

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