Editorial

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The medical profession is one of the most legally regulated and heavily standardised. Therefore there is a great deal of pressure to meet each and every legal regulation correctly or run the risk of being sanctioned or marked out. This is a normative exercise which should be effective at both professional and institutional levels and in clinics, hospital units and the high-speciality complexes.

Regulations in Mexico are very extensive. They are expressly outlined in the General Health Act on medical care and healthcare establishments, in a relevant framework within which medical care is covered under General Health. Compliance is mandatory in the public, private and social spheres, within this framework, medical practice and the doctor–patient relationship is contractual. It is therefore essential that both parties, doctors and patients, acknowledge that they have rights and obligations.

Health systems and medical practitioners are subject to great social pressure to provide favourable health outcomes. A cure or control has to be found for diseases and health problems, regardless of the patient’s previous condition, circumstances or the progression of their disease.

Given the current environment and the abovementioned circumstances, social pressure in particular, a movement in the attitudes and behaviour of practitioners towards defensive medicine has been observed worldwide. This growing phenomenon is increasingly present in everyday medical practice. Good medical practice becomes more difficult for practitioners each time the doctor–patient relationship is broken resulting in unnecessary expenditure. Doctors are requesting excessive laboratory and special tests in an attempt to reduce the margin of error in their care of each patient. This situation leads to overcompliance with medical science or over-diagnosis in order to confirm a presumed diagnosis and prove that procedures and treatments are being used for integral patient management. This phenomenon is neither ethical nor appropriate in a professional framework bound by the principles and values of medical practice.

Given increased compliance and demands for positive or favourable outcomes and given that such outcomes are not always possible since adverse effects inherent to medical practice itself can occur, we have reached the extreme situation where attempts are being made to make patients, their guardians or those responsible for them, jointly responsible for medical decisions. Informed consent forms to be signed by the patient are used to that end. It is important to point out that signing this document does not free doctors and staff, or the establishment, from any liability.

Adaptation to this reality by patients has been gradual and complicated, and the demand to achieve outcomes has become increasingly pressing. Grievances, complaints and disagreements are being presented regularly at different levels, to doctors, health institutions and specialist bodies (CONAMED) or civil and penal judicial authorities.

In compliance with the medical lex artis and applicable regulations, medical practitioners can only be peer assessed (assessed by other medical practitioners), taking into account the mode, time and place in each case. In other words, the medical act is examined under the very circumstances in which the procedure or actions were undertaken.

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The application of the medical *lex artis* then will vary depending on the speciality and the resources available in the healthcare establishment in question.

It is acknowledged in medical practice that errors in diagnostic appraisals or procedures can be linked more to skill and ability levels in the use of instruments and therapy resources than to medical knowledge. This means that appropriate expertise is required in addition to knowledge and know-how.

One of the relevant advances of the report published in 1999, “*To err is human*”, was to focus attention on professional healthcare practice as the central issue. However, the broader social, bureaucratic, financial and political aspects of the healthcare system have been ignored. It is only in the past three decades that the issue has gained international political momentum, driving more research and action in this field.

Unexpected outcomes and secondary effects of medical practice are regularly brought to light through medical complaints presented by patients using the legal resources available to them, i.e., civil proceedings for damages or penal action for intention to harm or malice, where it is implied that an offence has been committed.

Unfortunately, the healthcare system and practitioners themselves do not routinely report medical errors or adverse effects. There are no formal registers. Some institutions have made an effort, but have not created registers; they have merely recorded isolated cases.

Insurance companies in the United States have been working for many years with professional liability insurance. This type of insurance is used with a view to reducing financial risk given the high likelihood of an adverse event or failure in the outcome expected by the patient; the companies take on this risk and pay out if these situations arise. The cost is high and obviously impacts the high cost of medical care. Doctors can insure themselves with medical practice insurance against compensation payments, but they cannot insure against the indirect costs of litigation, such as time, stress, additional work and damage to reputation.

In sum, the person who uses the most structured and elaborate processes according to law often supposedly triumphs but objective, scientific, correct and truthful analysis of medical acts is rarely the result. Many cases are resolved unfairly against either the patient or the doctor.

The Mexican National Commission of Medical Arbitration (*Comisión Nacional de Arbitraje Médico*) was created to enable conflicts to be settled extrajudicially by medical arbitration, fundamentally resolving these conflicts and examining the medical act with the active participation of medical professionals, i.e., through peer assessment. This process ensures that the rights of both the patient and the doctor are respected and, above all, that the obligations of each party are observed. Malpractice has been found in some reports in up to 20 percent of complaints cases.

Here, each case is studied by period and specialty, which enables cases where malpractice has taken place to be established, in cases of arbitration and cases of expert opinion. Because the organs that impart justice request this expert opinion from the institution, as a result of these studies it has been possible to document malpractice in up to 30 percent of cases.

However, we must recognise that medical malpractice is a global problem even in the best hospitals and health systems. Perfection in medicine is the ideal, but is not always feasible. More than a century ago Osler defined medical practice as both a science and an art – a science of uncertainty and an art of probability. In 1908 Coadman researched and classified causes of unexpected death in surgery. Since then the presence of medical error in surgery has been acknowledged.

Medical error has been defined as an unintentional adverse effect of patient care resulting from an act of omission or commission in the planning or execution of care. An adverse event or incident is understood to be harm or injury brought about during medical practice that could have been prevented.

Malpractice is defined as a fault or imprudent action during medical practice that directly or indirectly affects the life or health of a patient. Malpractice can be divided into negligence, inexperience or malice.

In each, the intention to cause harm denotes the difference. Negligence or lack of duty can be interpreted as “I knew how to do it but through an imprudent oversight I did it badly”. Inexperience is a lack of skill, knowledge or experience in applying the art of medicine. In other words, “even though skilled, poor use was made of scientific or technical knowledge resulting in injury or death”. In these two situations of negligence or inexperience there was no intention to harm or injure and on analysis, a civil legal standard is necessarily indicated for unintentional or imprudent harm.

Malice can be defined based on intentionality or the presence of deceit, the practitioner “knew that they did not have the knowledge or the skills required yet delivered the care or procedure, with the consequent injury or death”. In this situation a penal legal standard must be applied.

“The problem with medical error is that it is very frequent and seldom reported”.

In a recent issue of the British Medical Journal in 2016, medical errors and malpractice are placed as the third cause of death in the United States. This study was undertaken by healthcare practitioners from John Hopkins University and deeply changed the perception of the problem.

The investigators examined mortality studies from 2000 to 2008. Then, using hospital admission rates from 2013, they extrapolated them over a base of 35,416,020 hospitalisations, and of these, 251,454 deaths related to medical error. This number of deaths represents a causal relationship in 9.5% of all deaths each year in the U.S.A. and places medical error ahead of the third cause of death, i.e., above respiratory disease. According to the CDC for 2013, 611,105 people died from heart disease, 584,881 died from cancer and 149,205 from chronic respiratory disease.

For this reason, the study of medical error should be a research priority and the necessary financial resources allocated. Furthermore, it is a reality that information on errors is not recorded on death certificates, since these are documents used by the CDC to classify causes of death and establish national health priorities.

Death certificates use the International Classification of Diseases (ICD) to determine cause of death; therefore causes relating to human error or the health system are not recorded on them. This situation is not exclusive to the
United States, according to the World Health Organisation, it also occurs in 117 countries which use the ICD system to code their mortality statistics. Added factors like medical error are not shown on death certificates.

The authors acknowledge that human error is inevitable, but "we must measure the problem better to design safer systems to lessen its frequency, visibility and consequences". They add that most errors are not caused by poor doctors, but by failures of the health system itself.

The specialties with the highest risk have adopted preventive measures and therefore many initiatives have been implemented to improve patient safety (the application of card schemes with checklists prior to surgical procedures, global and local patient safety initiatives, regulations aimed at risk reduction), eventually leading to a reduction in error margins.

Emergency doctors practice medicine in an environment lacking in information, which is high risk and technology rich. This environment can lend itself to defensive practice and increased costs. For example, if an emergency doctor decides to admit a patient to hospital this engenders hospital costs that might be 10 times higher than the costs of the patient’s visit to the emergency department.

"The more complex an activity, the more likely medical errors will be made".

Surgical procedures are a good example of this, particularly in specialties that are highly complex and with lengthy surgery times. Another clear example is high specialty where complex, invasive diagnostic procedures are used, with complicated operating technology, and equally complex medication and possible side effects, and the associated pressure in particular.

Various studies and meta-analyses have been published seeking better options to contain the phenomenon, to document possible medical errors, design prevention strategies against adverse effects, and issue recommendations directed at the specialists with the greatest risks and claims.

"Robust scientific methods, starting with assessment of the problem, are essential in approaching any health risk in patients". "The problem of medical error should not be exempt from the scientific method".

Therefore, I am convinced that healthcare systems and practitioners should not ignore this reality and together should drive strategies that will recognise medical errors as an opportunity for improvement. Healthcare systems must promote the ordered and open recording of such errors, undertake research studies of worthy cases and determine the action necessary to make them less frequent. To that end, the active participation of all medical teams in hospitals and qualified third parties is required in order to determine the frequency of the problem in an impartial, objective and documented way and act on it. This is particularly important since many studies have demonstrated that more than half these errors are preventable.

Further reading

8. Makary MA, Daniel M. Medical error—the third leading cause of death in the US. BMJ. 2016;353:i2139.