

Confronting and Managing Medical Errors

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Most doctors will make errors during their careers¹. A medical error occurs as the unintended consequence of an act undertaken in good faith. Often the error is small or moderate and causes no or minor harm. On some occasions, however, there are serious consequences leading to significant morbidity or death. The fallout from a major adverse incident is distressing for everyone involved, the patient, the family, and the care providers. The important first step is to care for the patient and to deal with any medical consequences following the error. The second step is to provide the patient and the family with a clear account about what happened. This is challenging because doctors have had little or no training on how to communicate with patients about an error. Saying sorry is not an admission of legal liability. The third step is the likelihood of being asked to write an account of one's clinical involvement in the case. This is a difficult exercise. Should it be long, should it be short, what details should be included. It is advisable to get advice from a senior colleague or legal help in completing this task. The impact of a serious mistake on the doctor and their family must be considered. They need appropriate help in order for them to continue their clinical activities, both in the immediate aftermath and into the future. The overall key considerations are compassion and medical care for the patient and support for the doctor.

When the frequency of medical mistakes is considered, there is commonly a discrepancy between perception and reality. Many physicians think that the rate is 1% while many reliable sources place the rate at 5-10%. This is understandable when the doctor is dealing with incomplete information and unpredictable settings.

In general, diagnostic mistakes are a more common cause of lawsuits than medication and treatment errors. Failure to diagnose is the most common allegation in medicolegal cases but it varies according to the specialty. In radiology it is 75%, in paediatrics 65%, in internal medicine 55%, and less commonly in the surgical disciplines. Diagnostic challenges are understandably more common in the emergency department (ED) and clinical medicine with rates of 12% and 15% respectively.

Much has been written about the diagnostic sequence in medicine, the formulation of the plan of what to do next. The choices are order tests, a trial of medication, referral to a specialist colleague, or watch and wait for a period of time.

Mistakes are not usually due to lack of knowledge but rather a failure to elicit a proper history, a failure to appreciate the significance of laboratory and radiology findings, and a failure to draw together the strands of the clinical picture. Kahneman and Tversky have described two types of cognition², fast and slow. The fast type, also termed intuitive, is applied in high volume, low acute practices such as ED. The second slow type, also termed analytical, is used when the clinical case is more complex, such as neurology. The latter demands deliberate decisions which are non-programmed, conscious, usually slow, and demanding.

Our brains rely on automatic processes as much as possible. However, over-reliance on the intuitive approach can lead to mistakes when the case is more complex and requires greater analysis. Undoubtedly, it takes both training and experience to recognise when to change from the intuitive to the analytical pathway. The ability to make this switch in a timely manner is the hallmark of a good physician.

It is difficult for doctors to strike the correct balance between lacking confidence and being overconfident³. A good doctor should possess a balanced amount of confidence and an equal amount of humility. It is about recognising the limitations of human cognition. The practice of medicine has been described as the science of uncertainty and the art of probability⁴. Patients on the other hand frequently expect diagnostic certainty and think in terms of 0% and 100% chance of having a particular condition. Despite our best efforts this is not always achievable.

It was as recently as the 1970s that cognitive biases were first recognised. Lack of confidence leads to indecision and inaction, while overconfidence can result in mistakes. Overconfidence occurs when the relationship between accuracy and confidence is miscalculated such that confidence is higher than it should be. It is related to excessive certainty and can lead to complacency and ultimately mistakes. Overconfidence can cause one to embrace evidence that supports the diagnosis and to reject data that does not. It is associated with a decreased likelihood of ordering additional diagnostic tests. There may be non-compliance with clinical guidelines and a failure to use decision-support resources⁵. In addition, it leads to a lack of critical thinking. It is important in difficult cases to ask oneself *'what might I be missing'*, *'what else could explain this set of symptoms'*, and *'should I review the patient's history again'*.

The more experience we have and expertise we gain in a given specialty, the more likely we are to demonstrate a degree of overconfidence in our decision making.

Overconfidence can start early in a doctor's career even during medical school. It is exemplified by the medical student who is far more confident than their clinical performance and examination results would indicate. Trainers need to consistently stress the importance of insight into one's level of ability. The guidance is to have a building level of confidence for trainees, and a steady, consistent level of confidence for senior doctors.

Although mistakes are inevitable, decisive actions can be taken to lessen them and enhance patient safety.

References:

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