Opinion

The Law of Averages: Uninformed Consent?

My childhood chum was fond of quoting the "law of averages" whenever he needed to cheer me up after I missed a short putt, which I did a lot. In its application to golf, the more bad shots in a row, the more likely a truly miraculous one will follow. Also known as "the gambler's fallacy," the law of averages declares that a good outcome is likely to follow a series of bad ones, to even things out. This helps explain why lottery tickets continue to sell well or, conversely, why people start feeling nervous about the likelihood of a bad outcome following a series of good ones. Of course, as my chum and I knew even back then, the odds of something occurring in the future do not depend on what has happened in the recent past. But it remains a compelling fallacy—even though we know it to be false, it still subconsciously drives our choices. There are other related fallacies, such as a conviction that the risk of a rare event is increased because it happened to a family member. Or that cultural beliefs are more valid than scientifically guided advice. All of these exert their subconscious influence and are strong drivers of the choices we make.

Early in my residency, I thought that carefully explaining the risk-benefit ratio to patients would cause logic to prevail. Naturally, I was disappointed when I discovered that logic had little to do with our encounters. One patient anecdote stands out: I asked Mr. Andrews why he had decided not to have recommended surgery, when his vision might be improved afterward. He said he noticed that the attending physician spent a lot of time looking at his hands in his lap, breaking eye contact. The body language, he said, was wrong, so he felt the risk was not worth taking.

So it is clear that patients are evaluating risk in their own way. Each patient is different, bringing a unique set of life experiences and beliefs to the decision of whether to agree to a medical intervention. But with all the hours we physicians have labored in studying statistics, it's easy to become frustrated that our carefully constructed statistical models of risk seem to matter so little to many patients. Instead, these patients are following a parallel pathway of "uninformed consent," as the physician may pejoratively view it. But from the patient's point of view, it's just as "informed" as the formal physician-led process, in that the patient has had time to reflect on the issues, factor in information from various sources (not necessarily physician-approved sources), and come to a decision.

Knowing these imperfections in the informed consent process leaves physicians wondering if we should continue with the status quo, carefully framing risk and choice for each patient in the context of scientific principles. Or should we attempt to include the patient perspective in our discussion? Patients expect us to be experts in the science; they are happy to supply their own perspective. There is wide variation in the way patients approach personal health risks. Some really appreciate the statistics, outcomes data, and evidence from the literature. Others go about evaluation of personal health risk from an intuitive perspective, going so far as to reject statistics as being doctor mumbo-jumbo. Still others decide on the basis of the law of averages as applied to their own family members who have undergone similar medical procedures. Whichever approach they use has validity for them, so I try mightily to respect it.

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