

## WHO'S SPEAKING?

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The question, "What matter who's speaking?" was posed by the forward French philosopher Michel Foucault in his analysis of the relationships of knowledge and power. As societies emerge, power is usually vested in a small group or person (eg, chief, prince, or king). Knowledge is an essential part of the leadership, and discipline is imposed from above. If the leader is accepted, then utility for the common good is demonstrated by maximum effectiveness and productivity. As societies mature, the leadership becomes more diffuse (democracy), and enforced discipline becomes self-discipline. A truth is a truth, whoever espouses it. More people have a say as to what should be going on, and knowledge is more available to everyone. Discipline becomes a greater necessity, so a society will not regress to the more authoritarian model or even anarchy.

This analysis epitomizes the growth and maturation of patient management in the intensive care unit during the past half century, although it could be equally applied to other fields of healthcare. The arrangement has gradually changed from the intensive care unit being run by a charismatic intensivist, who was expected to call most of the shots, to a multispecialty and multidisciplinary critical care service and a sharing of responsibility and decision making. It would be silly to suggest that there is not some director in charge, but even this role is evolving from dictator to facilitator.

In the quest for better patient care, we all tend to turn to authority and tradition rather than evidence in the face of uncertainty. It is interesting to speculate on why it is taking such a long time to adopt a low-tidal-volume strategy for patients with acute lung injury or respiratory distress syndrome. The knowledge (evidence) mandates keeping patients on a 6 mL/kg ideal body weight tidal volume,<sup>1</sup> keeping the

plateau pressure below 30 cm H<sub>2</sub>O, and allowing the arterial carbon dioxide level to increase (permissive hypercapnia) with carefully titrated amounts of positive end-expiratory pressure.<sup>2</sup> The evidence that this strategy could save both life and lungs with a 22% reduction in mortality has been available since 2000. Recently, at every major critical care meeting (including the World Congress last year), studies have been presented and great frustration has been voiced about the slow adoption of such simple maneuvers. Perhaps rapid shallow mechanical ventilation is upsetting because that pattern is associated with pulmonary failure in spontaneously breathing patients. It is sometimes hard to explain to our colleagues and the patient's family members that this is potentially beneficial. The lack of discipline to use the evidence-based therapy where evidence is both good and available is worrisome. The risk is that someone from the outside will become the authority for what we do at the bedside, and that person will become the one who is speaking!

It seems that our actions and beliefs frequently differ from the obvious, face values and evidence. A good paradigm might be taken from the art world, which tends to value paintings in dollars (frequently a great many dollars!). A beautiful picture is a beautiful picture, and in a truly logical world, a painting's beauty ought to dictate its monetary value. We do not live there! If it was painted by an old master, a modernist, or some teenaged art student, there is a manifold variation in its perceived value and what price it will go for at auction. Pablo Picasso, in his later years (he lived to the age of 92 and died in 1973), realized the value of his name and painted, drew, and modeled at a prodigious rate to cash in on his fame. There is the perceived uniqueness of an artist, which has led to a small army of authenticators on whom the art market depends to assess whether a painting was indeed painted by the attributed artist. The identity of the artist has very little to do with the aesthetics of the art itself.

Last year was the 50th anniversary of the death in a motor vehicle crash of painter Jackson Pollock. It

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was celebrated with an exhibition including 24 previously unknown but authenticated works. Pollock was an artist who placed large canvases (up to 17 feet long) on the floor, and then proceeded to splatter, fling, drip, and throw paint on them in a seemingly haphazard manner (action painting), resulting in a mass of splotches, curved rows of dots, and stripes. Six of the paintings were subjected to computer-assisted analysis and found to be possible forgeries. This situation was analyzed in an amusing editorial in the *New York Times*: “Mind Over Splatter”<sup>3</sup> written by Don Foster, an English professor at Vassar. If these 6 paintings are fakes or of dubious authenticity, discernable only by a computer program but not by experts, their value will be reduced on sale in one of the big auction houses, but the aesthetic values of the paintings will not have not changed. Should this aspect also be devalued? The simple answer is to sidestep the issue, because the value of these paintings is not wholly aesthetic. The artistic parallel of Foucault’s musing could be, “What matter whose painting?”

As a species, we seem to give value to who spoke the words, who painted the picture, who wrote the play. The use of quotations is a typical example. Simple, apt words and phrases are given more strength because someone famous said them first. We are comforted by feeling we are in the hands of good leaders and authority. We sometimes examine the evidence less closely when the presenter is a reputed expert.

Authority can leave us in the lurch. The Women’s Healthcare Initiative,<sup>4</sup> masterminded by the National Heart, Lung, and Blood Institute of the National Institutes of Health, is a typical example. This well-intentioned study started a decade ago, and its scope and expense was so large that it will be hard to repeat. Women over 50 had become underrepresented as subjects in medical research and had a few gender-specific problems. The most pressing problems seemed to be surrounding osteoporosis, cardiovascular disease, and gynecological cancer. The study addressed these problems with longitudinal studies on diet, hormone replacement therapy, and calcium administration. The fanfare that introduced the results earlier this year was taken up by the press with headlines declaring that a low-fat diet is not necessary for cardiovascular health or weight loss, implying that everyone can dig into their formerly forbidden foods, including Twinkies, with equanimity. No mind that a considerable number of the subjects in the low-fat group had more than the desired amount of fat intake, and the amount of trans, saturated, and unsaturated fat was not measured. Many women in both arms of the calcium study had been taking calcium and vitamin D supplements. The value of weight-

bearing exercise was not addressed. The hormone replacement therapy (HRT) studies did not address one of the major uses of HRT—the relief of the discomforts of menopause. The results were, in the end, very weak to recommend anything of great significance, and they have left us in a state of confusion, with a large percentage of the population flummoxed. When a spokesman of authority speaks, even with a large placebo-controlled, prospective study that contradicts much of what has already been published, it is up to us to examine the study, not just accept it.

The Surviving Sepsis Campaign<sup>5</sup> has stirred up more excitement than any major program in critical care this century. We now have bundles of things to do for a patient with sepsis or potential sepsis, some of it based on the protocol developed for early goal-directed therapy by Rivers in 2001.<sup>6</sup> Much of the success was likely to have been because of the “early” treatment of patients. This has generally been the case with “early” support of the circulation, such as the protocols by Ledingham<sup>7</sup> in the 1970s and Shoemaker<sup>8</sup> with supra-normal oxygen delivery in the 1980s. Investigators who were treating patients with established sepsis did not have the same success.

The Surviving Sepsis bundles were created by a multinational, multisociety consensus group that was brilliantly handled to produce guidelines for the management of patients with sepsis. No part of it could be objectionable to critical care practitioners. Most of the recommendations are standard critical care procedures, but the emphasis is on applying them without delay. It was forcibly pointed out by Mervyn Singer<sup>9</sup> that most of the recommendations are based on very shaky evidence, and much is at the level of expert opinion. This does not mean that many of the recommendations are bad, but that they have not been adequately tested to make them standards of care. We do not know which recommendations are going to improve outcomes for patients with sepsis. There may be a lot of make-work in the bundles that will not improve outcome. A cookbook approach has been put forward by one healthcare organization.<sup>10</sup>

Hospitals should use the bundles to create customized protocols and pathways that will function well within their institutions.... However, all of the elements in the bundles must be incorporated in those protocols.... Addition of other strategies not found in the bundles is not recommended.

The last recommendation is hard to take. Singer<sup>10</sup> suggests 2 strategies that were not considered—plasmapheresis and selective gut decontamination—and shares our concern that these guidelines are becoming de-

facto standards of care because the voice of authority is being listened to. There is a sting in the tail:

The protocols should very closely mirror the bundles, but allow flexibility for logistical and other needs specific to the local hospital.

but

The bundle will form the basis for the measurements your team will conduct... Therefore, if not all of the elements of the bundles are incorporated into your customized protocol, your performance on the measures will suffer.

The Editors are great supporters of the Surviving Sepsis Campaign. It has the potential to greatly improve the outcomes of patients with sepsis. The international nature of the enterprise has tailored the bundles to be applicable to countries where resources may be limited. It is not going to survive itself as a done deal, but needs to continue as a work in progress to achieve the highest level of acceptance based on evidence.

This commentary on how we behave was written to point out how easy it is to overlook the quality of the evidence and how easy it is to listen when authority is speaking. It does matter who's speaking. For critical care, let it be us!

The statements and opinions contained in this editorial are solely those of the Editors.

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