



sick role as a chosen role for the majority of patients.

Some patients play a different sick role. They often mistrust physicians and when they do seek help are unable to take advice because of their rigid ideas. Some patients resist taking and sometimes refuse to take antidepressant drugs for fear of "poisoning themselves." In such cases the patient often wants to take charge of decisions involving treatment. Most physicians will be uncomfortable if they have to treat someone inappropriately, at the patient's insistence.

It takes a lot of effort and understanding to work with these patients and to establish a therapeutic alliance whereby the patient has enough trust to follow the doctor's advice. By requiring patients to collaborate and make their own decisions we might sometimes be failing to take responsibility for our own role within the doctor-patient relationship.

Perhaps we need to assess each patient for the impact of the illness in terms of demoralization and capacity to make choices, as well as the capacity to collaborate and trust. It would then be part of treatment planning to encourage the patient's increased self-care.

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Received via email

[The authors respond:]

Our paper did not state or suggest that people consciously choose to play the sick role once they become patients. We hypothesized that being a patient makes people behave in a less active way than they might have foreseen for themselves when still healthy. Neither did we speculate on the mechanism of such a change. It may be the result of a process of emotional regression or demoralization, as suggested by Dr. Salole. It

could also relate to a fear of responsibility for a decision and its outcomes. Perhaps the misunderstanding is caused by the expression "playing the sick role," which was employed by Dr. Laine in her editorial. The phrase "playing a role" implies a conscious and voluntary act. We think that the role known in medical sociology as the "sick role" is adopted subconsciously.

In our paper we deliberately did not embark on an ethical discussion of the ideal of shared decision-making. However, in light of the emphasis given this topic by both the editorial and Salole's letter, we feel we should respond, to prevent readers from ascribing to us a moral viewpoint that is not ours. It is not clear whether Laine promotes shared decision-making because of patient preferences or because of empirical evidence for better health outcomes. An important difference exists between arguing for shared decision-making out of respect for patients' preferred role in decision-making (respect for autonomy) and doing so because of better health outcomes (for reasons of beneficence or from utilitarian motives). We indicated that, as long as evidence is lacking about patients' motivations regarding decision-making preferences, we should hold on to patient-centred medicine and respect patients' perspectives on their role in decision-making. We do not feel that evidence showing improved health outcomes is strong enough to "force" shared decision-making upon patients.

Finally, we subscribe wholeheartedly to Salole's point about the importance of the physician's role in this complicated process of people becoming patients. Not only must physicians be capable of gauging a patient's mental state and his or her reserves for coping with disease and treatment, but they must also be flexible and creative in adopting an idiosyncratic role that best responds to the patient's needs. Part of their role

is to stimulate patients' participation in, compliance with and acceptance of personal responsibility in the treatment plan — certainly not an easy task.

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Received via email

Clinical opinions on transfusion triggers

Transfusion decision-making has become much more complex than it used to be, and the process is now frequently aided by published algorithms or consensus statements.¹⁻⁵ Unfortunately, these sources do not always provide specific suggestions for specific clinical situations. We used the Internet to sample the opinions of a number of practising physicians about the transfusion trigger they would pick in a set of hypothetical clinical settings and then constructed a series of histograms of minimum acceptable hemoglobin concentrations for a variety of clinical scenarios. For example, for a sample of 26 practising anesthesiologists asked to provide a perioperative transfusion trigger for an otherwise healthy anemic 45-year-old woman undergoing total abdominal hysterectomy for menorrhagia, the mean transfusion trigger was 76.3 g/dL (standard deviation 7.7). Opinion data were also obtained for perioperative scenarios involving patients with coronary artery disease, patients with prior successful myocardial vascularization, elderly patients and others.

With this method, clinicians dealing with an actual clinical situation might choose a transfusion trigger that is the mean of the opinion histogram corresponding to that sce-



nario, thus choosing a middle-of-the-road decision point. Alternatively, physicians with patients who have specifically requested not to receive transfusions unless the opinion to give the transfusion is shared by a substantial majority of physicians might pick a transfusion decision threshold 2 standard deviations below the mean.

It is our hope that with the continuing development of histogram data for a large number of representative clinical scenarios this technique of expressing clinical opinion may become useful in clinical decision-making.

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Received via email

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Ordering radiographs with the law in mind

In the article "Variation in emergency department use of cervical spine radiography for alert, stable trauma patients" (*Can Med Assoc J* 1997;156[11]:1537-44), Dr. Ian Stiell and associates indicate that cervical

spine radiography could be used more efficiently and cost-effectively if there were clinical guidelines governing its use. Even though I agree with these authors, I order this type of imaging for asymptomatic patients who have been in motor vehicle accidents, particularly rear-end collisions that may have caused cervical hyperextension. The explanation that "I didn't think, on clinical grounds, that such an imaging study was warranted" holds little sway in Canada's courtrooms.

If there is loss of cervical lordosis because of muscle spasm after a motor vehicle accident, the speed with which the first radiographs were obtained becomes a factor in determining what health problems eventually develop and the size of insurance settlements. A person who has survived such an accident may have loss of cervical lordosis immediately, but it may be 2 or 3 days before symptoms appear. The radiographs obtained initially will serve as a baseline for subsequent radiographic findings.

Because of my court experiences, I send patients to the radiology department as soon as I have seen them, even if the casualty officer feels that imaging is unnecessary. I know that in the long term I am the one who will be questioned extensively about muscle spasm, onset of symptoms and radiologic evidence of muscle spasm. I also order lumbar spine films because lap-belt injuries may cause lumbar muscle spasm. This means that evidence will be available should the problem reach the courtroom. The existence of radiographs often makes it unnecessary to go to court because, despite the possibility of pre-existing conditions such as osteoarthritis, the insurance adjusters and lawyers will decide that a claim is legitimate and settle it. In the long run these radiographs probably save money, even if they do not necessarily help me in deciding how to handle these soft-tissue injuries.

Legal questions sometimes dictate whether radiographs should be ordered. Twenty-five years of experience have led me to request such images as soon as possible after an accident because I might need them 3 or 4 years later in court.

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Virtual reality in medical training

The recent article "Time to 'rethink models of medical education,' ACMC meeting told," by Nancy Robb (*Can Med Assoc J* 1997;157[3]:304-5), contained an important sidebar on virtual reality. It reported on a workshop given by Dr. David Kaufman, in which he described some of the new developments in this field that are being applied to medical education.

Virtual reality is an interesting form of simulation and may be best suited to the acquisition of both knowledge and skills. The simulators usually fall between low-fidelity models, as found on a computer screen, and medium- to high-fidelity simulators, which can re-create a cockpit or an operating room. Low-fidelity simulators are best suited to acquiring knowledge, whereas the more sophisticated models allow the acquisition of knowledge, skills and attitudes.¹

The sidebar reported the hope of workshop participants that virtual reality might allow physicians (including those in training) to "reach mastery" of a skill and then to maintain that mastery. Kaufman added that "airline pilots have the same biologic responses when they practise on aircraft simulators as when they fly. Indeed, pilots have to be certified in flight simulation before they can fly commercially."

However, one important use of