

## Patient Satisfaction—Politically Correct Fashion of the Nineties or a Valuable Measure of Outcome?

The excellent review by Wu et al.<sup>1</sup> in this issue of *Regional Anesthesia and Pain Medicine* deals extensively with “patient satisfaction.” Many of us continue to be puzzled by this subject, which looks very much like one of these new, soft, but politically correct terms of the nineties—fashionable, but poorly defined. This is even more so in countries like New Zealand, my current place of practice, where one is not encouraged to use the term patient, but is asked to resort to “client” or “consumer satisfaction.”

This impression of a recent fashion trend is confirmed by a MedLine search for the key words “patient satisfaction” and “anesthesia.” It yields a total of 415 articles, of which 399 were published in the years 1990-2000 and only 6 before 1987. Obviously, patient satisfaction is a term of the nineties.

But what is patient satisfaction really?

### A Term Too Hard to Define?

The initial difficulty we as scientifically trained professionals have with something like “patient satisfaction” is the subjective nature of the term. Similarly to pain, where we had to learn to accept its subjectiveness (which is still hampering its relief), there is no objective number, and no monitor can measure patient satisfaction. In contrast to pain, where we now have a generally accepted definition,<sup>2</sup> even the authors of the review under discussion admit that “there is currently no widely accepted model of patient satisfaction.”<sup>1</sup>

Many of the currently published studies on the issue seem to avoid a definition at all costs.<sup>3-5</sup> However, extensive work in the area has been done, primarily by psychologists and social scientists. My preferred psychological theory suggests that patient satisfaction describes the match between the patient’s expectations and the perception of the service received. This has been worded in different ways: “the provider’s success at meeting those client values and expectations which are matters on which the client is the ultimate authority”<sup>6</sup> or simply “fulfilling an expectation.”<sup>7</sup>

There are many other theories, outlined very well in the review. However, the concept of matching of patients’ expectations sounds quite compelling to me and is confirmed by research into determinants of patient satisfaction; greater degree of satisfaction is linked to congruence or conformity with patients’ expectations, to quality of verbal and nonverbal interactions between the provider and the patient (i.e., setting and fulfilling expectations), and to greater accessibility, availability and convenience (i.e., again fulfilling basic expectations of the patient.<sup>1</sup>

### A Parameter Too Difficult to Measure?

Already in 1996, a publication had this question as a title.<sup>3</sup> Many attempts have been undertaken to overcome this problem. Currently available are a wide range

of measurement tools from elementary unidimensional instruments to multi-item multidimensional surveys, which have undergone complex psychometric construction.

Often simple questions such as “Are you satisfied with the anesthetic?” or “Would you have the same anesthetic technique again?” with a Yes/No option are asked. These approaches clearly have only very limited use. Other global measurement tools are verbal or numerical rating scores or visual analog scales to answer questions related to patient satisfaction with overall or specific aspects of care. This simple methodology can be very useful, as outlined below and shown quite well by Tong et al.<sup>6</sup>

The most extensive and widely applied methodology, on the other hand, comes from the group around Paul Myles in Melbourne, Australia. In a series of publications over the last 2 years, they describe the development and psychometric testing of a 9-point Quality of Recovery Score (QoR).<sup>8</sup> They then applied this instrument to 5,672 of their patients, thereby identifying relevant factors of patient dissatisfaction.<sup>9</sup> Recognizing its limitations, the group subsequently developed and psychometrically constructed an expanded 40-item questionnaire QoR-40.<sup>10</sup> Reassuringly, they found convergent validity between this complex tool and a single visual analog scale. This QoR-40 instrument has now been applied prospectively to 10,811 patients, the largest satisfaction survey ever published in anesthesia.<sup>5</sup> Again the results are meaningful, as several treatable or preventable factors contributing to dissatisfaction were identified.

### **A Measurement Too Vague To Be Useful?**

There is general agreement that rudimentary unidimensional tools such as a single numeric rating score “cannot accurately measure the multifaceted nature of patient satisfaction and may actually reflect satisfaction with other parts of the patient’s medical care.”<sup>1</sup> The author of this editorial was, therefore, quite skeptical about use of such simple instruments. However, the experience of our research group with this tool in a series of studies has not confirmed this prejudice.

In an audit comparing systemic patient controlled analgesia (PCA) with continuous regional analgesia, patients under care of the same Acute Pain Service in the same hospital (i.e., similar “other parts of their care”) rated their satisfaction with continuous regional analgesia higher than with PCA.<sup>11</sup> This was a reflection of their better analgesia, but nevertheless surprising, because PCA was perceived to be more satisfying to patients, as they were in control. We have by now learned that this was a misconception and that control over analgesia is not valued by patients.<sup>12,13</sup>

A dose-finding study for epidural ropivacaine infusions gave us the opportunity to analyze this phenomenon in a true randomized double-blind fashion.<sup>14</sup> All patients had an intravenous morphine PCA; they were randomized to epidural saline or increasing concentrations of epidural local anesthetic. Not only was patient satisfaction lowest in the PCA-only group, but it increased in a dose-dependent fashion with epidural local anesthetic concentrations.

Finally, addition of regular oral acetaminophen to morphine PCA in patients after orthopedic surgery increased patient satisfaction significantly in comparison to addition of placebo.<sup>15</sup>

Obviously, patient satisfaction, even only measured by a unidimensional simple tool, is sensitive enough to identify minor changes in patient care in an otherwise stable clinical environment.

In conclusion, patient satisfaction is an increasingly well-defined, sensitive parameter for which measures of varying complexity are validated. As Wu et al. show, there is no question that it is an, if not the most, important endpoint in outcomes research.<sup>1</sup>

Regional anesthesia and pain relief influence parameters positively, which have been identified as predictors of high patient satisfaction such as better pain relief and reduced nausea and vomiting. In particular, those of us who are practicing regional anesthesia and pain relief should think more about assessing patient satisfaction. As the authors of the discussed review conclude, "there are many potential benefits of regional anesthesia and analgesia, which may result in an improvement of patient satisfaction."<sup>1</sup>

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