



Commentary

Patient-centered health care: are opioids a special case?

Jane C. Ballantyne, MD, FRCA*

Department of Anesthesiology and Critical Care, Penn Pain Medicine Center, Tuttleman Building, 1840 South St, Philadelphia, PA 19146, USA

Received 10 June 2009; accepted 12 June 2009

COMMENTARY ON: Wallace AS, Freburger JK, Darter JD, et al. Comfortably numb? Exploring satisfaction with chronic back pain visits. *Spine J* 2009;9:721–8 (*in this issue*).

Modern medicine challenges even the most fundamental of values—that the physician must use medical skills for the relief of pain and suffering, while doing no harm. This “Hippocratic” tradition persisted through two millennia while medicine barely advanced beyond palliation. It is not surprising then that patients accepted whatever their physicians had to offer, and at their discretion, because it was comfort and not cure that was offered. How different the situation is today when medical technology has the capability of altering life itself—conception, birth, survival, fertility, gender, organ renewal, disease processes, and even death. So profound are the implications of medical decision making that physicians no longer dominate in these decisions: it is the patients who have claimed the right to choose, and patient-centered outcomes that are favored [1,2].

What follows is that patient satisfaction with treatment has become a desirable outcome, and one that can be equated with quality of care. Yet patient satisfaction is a complex concept that involves social, demographic, cultural, affective, and cognitive factors, so data on patient satisfaction must be interpreted with caution [3–5]. Repeatedly, studies have demonstrated high levels of patient satisfaction with pain care, despite persistence of pain [6–8]. How can this paradox be explained? It seems that simply addressing pain, even if the treatment itself has only marginal benefit, may improve patient satisfaction [9,10]. Validating a patient’s complaint of pain, a strong clinician-patient relationship, trust that relief is at hand, and confidence that the best available treatment has been

provided are all powerful drivers of patient satisfaction, whereas pain scores per se seem less important [6,11,12].

Now what if the treatment involved in a patient satisfaction analysis is an opioid; how must this alter its interpretation? Patient satisfaction itself is a complex construct subject to multiple influences that can easily be buried or missed in a study, compromising the validity and reproducibility of the results [5,13]. In the case of pain treatment, even care that does not meet treatment goals may achieve high satisfaction ratings. If that treatment is an opioid, the issues become even more complex because the factors that drive patients to seek opioids for the treatment of pain, and in turn express satisfaction with opioids (or dissatisfaction if they are withheld) are themselves complex. A major factor is, of course, addiction. Although it may be the case that true iatrogenic addiction (addiction arising as a direct consequence of opioid treatment of pain) arises only rarely [14], the fact that opioids are addictive produces other complications such as diversion. In addition, opioids could be sought and used to satisfy a preexisting addiction. Hopefully, these are rare events that can be minimized by careful practice.

By contrast, dependence being a necessary adaptation to continued opioid use is not a rare event and is an important driver of opioid seeking [14]. There is a certain desperation (for relief) associated with pain. Yet paradoxically, adding opioids, although they may sometimes be the best or only option for relieving pain, can add to that desperation. As dependence develops, associated withdrawal states can induce loss of well-being (withdrawal, anhedonia), classical physical symptoms of withdrawal, possibly subtle in pain patients who do not (or should not) withdraw precipitously, and reemergence of pain (withdrawal-induced hyperalgesia and tolerance) [14]. Thus, satisfaction with opioid therapy could be as much to do with fear of discontinuation, as with satisfaction with the drugs’ effect.

The study by Wallace et al. [15] in this issue of *The Spine Journal* attempts to identify the factors associated with

DOI of original article: 10.1016/j.spinee.2009.04.022

FDA device/drug status: not applicable.

Author disclosures: none.

* Corresponding author. Department of Anesthesiology and Critical Care, Penn Pain Medicine Center, Tuttleman Building, 1840 South St, Philadelphia, PA 19146, USA. Tel.: (617) 803-1787.

E-mail address: jane.ballantyne@uphs.upenn.edu (J.C. Ballantyne)

satisfaction with a last health-care visit and intention to seek alternative or additional care for patients with chronic low back pain. Other variables assessed are disability, pain scores, quality of life, and health-care utilization. Although lack of insurance was the only association with intention to seek alternative or additional care, opioid use was the sole association with being satisfied with the last health-care visit. Satisfaction occurred despite lack of improvement in measures of disability, pain scores, quality of life, and health-care utilization. It could be argued that the measure of opioid usage used by these investigators—patient report of use or not of opioids in the past 30 days—was too broad and ignored possible differences such as choice of dose or drug that could affect efficacy and outcome. Moreover, because the time of last visit is not necessarily within 30 days of the interview, opioid use is possibly not linked to the visit. However, the findings do hint that there is a link between opioid use and satisfaction with treatment and, yet again, that this can arise despite disappointing treatment effects in terms of the traditional goals of pain therapy. Another notable finding is that as many as 56% of patients in the study sample, consisting of patients who had sought medical care within the past year for chronic low back pain, report use of opioids. Is this because this is a selected group of patients whose needs are not satisfied by self-management techniques? Does continued demand for treatment ultimately persuade clinicians to prescribe opioids? Are patients then satisfied with opioids because they believe there is nothing better?

Opioid treatment of chronic pain was popularized in the United States in the 1980s and 1990s; yet by early in the present decade, there was little evidence that opioid treatment was fulfilling its goal of improving the lives of pain sufferers [16]. Recognizing a need, several epidemiological studies have been since conducted and published, with some key studies finding, just as Wallace et al. have found that there are few gains associated with prolonged opioid therapy [17–19]. In a study by Dillie et al., patient satisfaction was assessed, and high-dose therapy was distinguished from low-dose therapy. This study found that the only benefits of high-dose opioid therapy were better mental health quality of life and improved patient satisfaction. All other measures, including pain, physical function, general health, social function, and vitality, deteriorated with high-dose opioid therapy. In contrast, low-dose opioid therapy showed broader benefit with improvements in pain, physical, and mental function.

Medicine has evolved into a service industry that competes for customers. In such a system, health-care decisions are often more patient-driven, less clinician-driven. Present-day outcome assessments include patient-centered outcomes and patient satisfaction metrics. Although such metrics shape the health-care market to an increasing extent, how rational are they in the business of providing good care? It has become clear that US style market-driven health care fails not only in those patients who cannot get care, but in many senses in those who can, and at a prodigious cost [20]. Whatever changes are instituted, and

change is urgently needed, one trend seems certain and that is toward favoring (funding) treatments with positive outcomes (value based care) rather than interventions with unproven benefits. The challenge will be to agree on what outcomes are “positive” and desirable and what is the role of patient satisfaction.

The Wallace and colleagues' study [15] is as much a comment on the inadequacies of the type of intervention offered by modern medicine for the relief of pain as on the desirability of opioids. There are many reasons that opioids could be favored: at least initially, opioids do provide good symptom control; continued treatment with opioids validates a pain complaint; and discontinuing opioids may be uncomfortable and can be interpreted as needing opioids. Patients who continue seeking medical care for pain are a self-selected group of those who have difficulty with internal methods of control; and sometimes opioids are sought and favored for non-medical reason. The study would suggest that opioids are favored despite poor outcomes, but a closer look at how outcome is related to dose, timing, drug choice, and patient selection, which was not done here, might have revealed that carefully managed chronic opioid therapy, as opposed to a haphazard attempt to short circuit pain with opioids, does indeed produce good outcomes.

There is much to be learned in terms of genetic differences in analgesic responses and addiction risk, pharmacological manipulation of analgesics that could reduce dependence, dose and timing effects, and how and when to select patients for chronic opioid treatment. Such advances could help us put opioids and other medications to better use. What is already abundantly clear, though, is that we do not empower patients with the promise of external control of their pain: what is needed is empowerment through better understanding and knowledge of the limits of external control and the value of internal control [21,22].

References

- [1] Advisory Commission on Consumer Protection and Quality in the Health Care Industry. Patients' rights and responsibilities Available at: <http://www.hcqualitycommission.gov/cborr/>. Accessed July 8, 2009.
- [2] Joranson DE, Gilson AM. State intractable pain policy: current status. *Aust Prosthodont Soc Bull* 1997;7:7–9.
- [3] Fleisher LA, Mantha S, Roizen MF. Medical technology assessment: an overview. *Anesth Analg* 1998;87:1271–82.
- [4] Wu C, Naqibuddin M, Fleisher LA. Measurement of patient satisfaction as an outcome of regional anesthesia and analgesia: a systematic review. *Reg Anesth Pain Med* 2001;26:196–208.
- [5] Rubin HR. Can patients evaluate the quality of hospital care? *Med Care Rev* 1990;47:267–326.
- [6] Dawson R, Spross JA, Jablonski ES, et al. Probing the paradox of patients' satisfaction with inadequate pain management. *J Pain Symptom Manage* 2002;23:211–20.
- [7] Corizzo CC, Baker MC, Henkelmann GC. Assessment of patient satisfaction with pain management in small community inpatient and outpatient settings. *Oncol Nurs Forum* 2000;27:1279–86.
- [8] Hwang SS, Chang VT, Kasimis B. Dynamic cancer pain management outcomes: the relationship between pain severity, pain relief,

- functional interference, satisfaction and global quality of life over time. *J Pain Symptom Manage* 2002;23:190–200.
- [9] McCracken LM, Klock PA, Mingay DJ, et al. Assessment of satisfaction with treatment for chronic pain. *J Pain Symptom Manage* 1997;14:292–9.
- [10] Ward SE, Gordon DB. Patient satisfaction and pain severity as outcomes in pain management: a longitudinal view of one setting's experience. *J Pain Symptom Manage* 1996;11:242–51.
- [11] Curtis P, Carey TS, Evans P, et al. Training in back care to improve outcome and patient satisfaction. Teaching old docs new tricks. *J Fam Pract* 2000;49:786–92.
- [12] McPhillips-Tangum CA, Cherkin DC, Rhodes LA, Markham C. Reasons for repeated medical visits among patients with chronic back pain. *J Gen Intern Med* 1998;13:289–95.
- [13] Linder-Pelz SU. Toward a theory of patient satisfaction. *Soc Sci Med* 1982;16:577–82.
- [14] Ballantyne JC, LaForge SL. Opioid dependence and addiction in opioid treated pain patients. *Pain* 2007;129:235–55.
- [15] Wallace AS, Freburger JK, Darter JD, et al. Comfortably numb? Exploring satisfaction with chronic back pain visits. *Spine J* 2009;9:721–8.
- [16] Ballantyne JC, Mao J. Opioid therapy for chronic pain. *N Engl J Med* 2003;349:1943–53.
- [17] Eriksen J, Sjogren P, Bruera E, et al. Critical issues on opioids in chronic non-cancer pain. An epidemiological study. *Pain* 2006;125:172–9.
- [18] Dillie KS, Fleming MF, Mundt MP, French MT. Quality of life associated with daily opioid therapy in a primary care chronic pain sample. *J Am Board Fam Med* 2008;21:108–17.
- [19] Fanciullo GJ, Ball PA, Girault G, et al. An observational study on the prevalence and pattern of opioid use in 25,479 patients with spine and radicular pain. *Spine* 2002;27:201–5.
- [20] Fuchs VR. The proposed government health insurance company—no substitute for real reform. *N Engl J Med* 2009;360:2273–5.
- [21] Von Korff M, Moore JE, Lorig K, et al. A randomized trial of a lay person-led self-management group intervention for back pain patients in primary care. *Spine* 1998;23:2608–15.
- [22] Lorig KR, Sobel DS, Stewart AL, et al. Evidence suggesting that a chronic disease self-management program can improve health status while reducing hospitalization: a randomized trial. *Med Care* 1999;37:5–14.