

# Spine Surgery and Ethics

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## ABSTRACT

The study of ethics and spine surgery has emerged primarily around issues regarding conflict of interest and disclosure. While media attention, reports of misconduct, and congressional action make such a development easily understood; this singular focus is not sufficient for resolving the many ethical issues that the practice of spine surgery raises today. In this paper, we examine how spine ethics has become a kind of disclosure ethics. It is suggested that a more comprehensive paradigm is needed to resolve the difficult ethical questions facing the practice of spine surgery today.

**KEY WORDS:** Conflict of interest, Disclosure, Ethics, Industry

## Is Spine Ethics more than Disclosure?

“Conflict of interest” and “ethics” are both hot topics in spine surgery today. Due in part to surgeon misconduct and lax or obscure ethical standards, ethical improprieties seem to be the domain of the spine surgeon these days. All of this conflict of interest (COI) talk seems to suggest that ethics in spine surgery is mostly about managing conflicts of interest. And truthfully, accusations of research bias, physician kickbacks, and unnecessary surgeries have rightly drawn most of the attention to these issues. As a result, spine surgeons have come to rely heavily on an ethics of disclosure, which has become, in some ways, an obstacle to the development of a more comprehensive “ethics culture” in spine surgery. In this paper, we review the issues associated with the recent conflict of interest debate and explain how these issues have shaped the larger discussion of ethics in spine surgery in ways that are both good and bad. We then explore additional domains in ethics as they relate to spine surgery and conclude with the notion that ‘ethics’, as it pertains to spine surgery, is much more involved and complex than a simplistic singular focus on disclosure.

## Conflict of Interest and Spine Ethics

Discussions regarding COI are commonplace in today’s spine related literature. Recent media attention

has propelled this issue to the front pages of newspapers and major medical journals, and not without good reason. Current studies estimate that about 60% of medical research in the US is funded by industry compared to 28% by the National Institute of Health (NIH) (13). Both clinicians and researchers have been targeted by the media for inappropriate financial relationships and bias in research findings (2,5,14,17). The issue has even prompted US congressional action in the form of Senate committees and the Physician Payments Sunshine Act (16).

In response to this scrutiny, ethicists, surgeons, and national medical organizations have devised various policies, codes, and procedures for managing conflict of interest issues. Major national organizations including the American Medical Association (AMA), American Association of Neurological Surgeons (AANS), and the North American Spine Society (NASS) now publish ethical codes and detailed policies for managing conflict scenarios (1,8,10). The ethical principle at the heart of many of these codes is “disclosure.” Specifically, this concept implies that any relationship with industry should be reported to patients, departments, institutions, and even the federal government in order to be considered ethically permissible.

### *The Principle of Disclosure*

The disclosure principle is a useful remedy to the problem of conflict of interest. It promotes open communication between the patient and physician and/or researcher and subject and respects the fundamental duty of informed consent. Disclosure is democratic in that it allows patients to decide for themselves the acceptability of certain relationships. It is also the least restrictive method of managing COI scenarios, as it requires the least oversight and need for regulation (12).

Of course, disclosure has its limitations. First, disclosure requires an educated patient population-one that is able to understand the medical system and how financial arrangements might influence medical decision-making. If such is not the case, patients may not possess the ability to interpret disclosures and may not possess the knowledge or ability to seek out alternative treatment options or providers. Second, disclosure does not provide solutions to conflict scenarios; it only reveals the potential problems. And so, without mandatory procedures and ethical codes for dealing with conflict situations, the mere act of reporting questionable relationships would seem to only heighten public anxiety and suspicion (15). In some ways, disclosure can only serve to worsen the problem.

At its core, the principle of disclosure presumes that some aspect of a relationship is ethically questionable or perhaps unacceptable. But, disclosures fail to identify what part or aspect of a relationship is at fault. Moreover, disclosure is likely inadequate for banning true wrongdoing since it is often the case that truly egregious actions go unreported. After all, a physician who knowingly accepts kickbacks is unlikely to report such activity to appropriate authoritative bodies.

This seems to be the central problem with disclosure. To borrow a phrase used by Joel Fleishman, disclosure is more of a "slogan than solution" to the problem of physician conflicts and public distrust of the medical profession, and in spine surgery more specifically. Even with organizations such as NASS and AANS publishing procedures for disclosing financial conflicts, media reports and new congressional action reveal a problem with the patient physician relationship more than policy or procedure. Simply devising better mechanisms for disclosure does little to repair a more global loss of trust.

### *The Narrow Focus of Spine Ethics*

It is unfortunate, but not unexpected, to find that ethics in spine surgery has become little more than an ethics of disclosure. Certainly, the current media focus on conflict of interest issues in spine surgery has driven ethical discussion in single direction for some time. But, such focus has placed the ethical practice of spine surgery at risk by ignoring other ethical issues in the field and failing to develop new solutions and approaches to ethical problems. For example, there exists only one organization in the US dedicated to spine ethics, the Association for Ethics in Spine Surgery (AESS), and one affiliated organization, the Association for Medical Ethics (AME), both of which are dedicated to the sole purpose of increasing awareness of financial conflicts of interest (3,4).

Of course, NASS, the AANS, and the American Association of Orthopedic Surgeons (AAOS) publish ethical codes of conduct (14). However, for the most part, these ethical codes provide only general rules of conduct, provide little explanation of the rules, and devote most of the content of these policies to conflict of interest issues and guidelines for disclosure. Table 1 shows a brief overview, by the authors, of all COI and non-COI related ethics policies published by these three organizations in recent years. As depicted in the table, NASS publishes two major policy statements on ethics, one devoted to a general code of ethics and the other to disclosure policy. The AAOS publishes three ethics related policy statements, two devoted to more general ethical issues and one to conflict of interest issues. The AANS has produced more ethics policy statements when compared to NASS and AAOS, but conflict of interest/disclosure related policies still compose 40% of all ethics related policies published since 1987.

Ethical issues in spine surgery require more comprehensive solutions than those offered by the principle of disclosure and conflict of interest debates. The education of surgical residents and trainees requires the development of surgical competencies for which disclosure ethics offer little help. Publication bias within the literature and the use of costly and unproven devices demands that we rethink how we approve new treatments and implement new devices (7). The current practice of disclosure-based ethics simply acknowledges this problem and shifts the decision-making burden to the patient.

**Table 1:** Published Conflict of Interest (COI) and General Ethics Policies among US National Organizations

	AANS	NASS	AAOS
COI related policies/ guidelines	4	1	1
Non COI ethics policies/ guidelines	6	1	2
Total	10	2	3

Finally, regional practice differences in spine surgery, malpractice and professional conduct issues, and the needs of the underserved in our own country and abroad require more elaborate answers from spine ethics that go beyond disclosure policies and procedures (18).

### *A More Comprehensive Spine Ethics*

The problem with ethics in spine surgery is shared by the larger surgical community in general. While classic medical ethics principles such as autonomy, beneficence, non-maleficence, and justice have been used to articulate theories on informed consent, end of life issues, and resource allocation to name a few, much of the flavor of this discussion has been limited to medical aspects of these problems. This matters because the nature of surgical illness and the approach of surgeons to disease bear out some important differences for the study of ethics in this field. These differences are important for developing a comprehensive ethics of surgery, and more specifically, spine surgery.

The fundamental quality that seems to distinguish surgeons from other physicians is what Joseph Fins calls “surgical proximity (11).” Surgical work including education, research, and patient care is often a highly personal and intimate task; one that links the action of the surgeon more directly to the outcome of the patient. As Charles Bosk described in *Forgive and Remember: Managing Medical Failure*, “When the patient of an internist dies, the natural question his colleagues ask is, ‘What happened?’ When the patient of a surgeon dies, his colleagues ask, ‘What did you do?’” (6).

Fins argues that it is this intimate character of surgical work that makes ethical issues in this field somewhat unique from their medical counterparts. This has interesting ramifications for surgical issues like research bias, informed consent, and even conflict of interest.

Surgical research outcomes often represent the skill of the operator in addition the efficacy of the device or implant; and so outcomes tend to blur the objective with the personal. Even the decision to pursue surgery is based upon the surgeon’s ability to produce a beneficial outcome, rather than simply the disease entity. Therefore, a patient’s decision to consent to a procedure is often a more paternalistic process than in the medical sphere, one that places a unique moral responsibility on the surgeon. Finally, (perhaps not so surprising) conflict of interest is nearly unavoidable in the surgical domain, since the surgeon’s involvement in research and patient care is so highly personal.

Ethics in spine surgery then must emanate from the nature of the particular type of work involved and the responsibilities its practitioners. This means that more than disclosure, spine ethics must acknowledge the “proximity” of its practice and the unique challenges presented and responsibilities created by this fact. And so, for example, conflict of interest policies must acknowledge the personal nature of surgical work and seek to limit abuses without rendering surgical innovation impossible. In turn, surgeons must work harder to inform patients of not only the risks, benefits, and alternatives of a procedure, but also the ability and limitations of the operator. It is these considerations and many more that require greater development in a new, more comprehensive spine ethics.

### **CONCLUSION**

Ethics in spine surgery has evolved largely around the issue of disclosure in conflict of interest scenarios. Constant media attention to industry involvement in the field, combined with recent published reports of financial kickbacks and biased research results, make such a development easily understood. But, disclosure ethics is an inadequate paradigm for approaching the myriad of ethical issues facing the practice of spine surgery today. Arguably, it is not sufficient for managing conflict of interest issues either. Spine surgery lacks a more comprehensive ethics that accounts for the unique nature of surgical practice, one that places the surgeon in a uniquely personal relationship with the patient and his/her welfare. It is the responsibility of ethicists and surgeons alike to now elaborate a more comprehensive spine ethics; one that better accounts for the moral consequences of “surgical proximity” to patient care.

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