Direct-to-Consumer Marketing: Implications for Patient Care and Orthopedic Education

Mohamad J. Halawi, MD, and Wael K. Barsoum, MD

Direct-to-consumer marketing (DTCM) is the promotion of health-related products or services directly to patients. Although this topic is not new to orthopedics, several emerging trends hold troubling implications for patients as well as orthopedic surgeons, particularly surgeons in training.

Orthopedics DTCM most commonly involves television and print advertisements. Supporters contend DTCM is an empowering educational tool that increases awareness of medical ailments and encourages patients to seek treatment. Opponents point to inaccuracies and misleading claims. Bhattacharyya and colleagues[1] found that about half the claims in orthopedic print advertisements were not supported by clinical evidence. Woloshin and colleagues[2] found that information in DTCM was vague and often was designed to act on the emotions. Patients misled by these claims and innately seeking improvement could present with unreasonable expectations and difficult discussions that can be detrimental to the patient–physician relationship.[3]

Given changing patient demographics and the information revolution, the effects of DTCM likely will continue to grow. Total joint arthroplasty (TJA), which represents Medicare's largest expenditure,[4] is a classic example. Today's TJA patients are younger, more active, and better educated, and they live longer, have higher expectations, and are more reliant on the media.[5] Television is no longer our main medium—the internet is the source of healthcare education for 70% of adults in the United States.[6]

Healthcare reform has also brought significant changes in the delivery of DTCM. In an era of competition for market share brought by increased demand and decreased reimbursement, DTCM has evolved into sales pitches by hospitals and physicians. Robotic joint replacement, minimally invasive surgery (MIS), use of the anterior hip approach, use of sex-specific or high-flexion knee implants, and other practices have become popular marketing tools for surgery centers competing for new patients. As a result, patients often present not only with a complaint but with a request for a particular procedure.[4,5] Labovitch and colleagues[7] found that 70% of MIS information on the internet was produced by hospitals and private medical groups, and only 6% was produced by industry. Although the vast majority of the sources reported on the advantages of MIS, only 15% explained patient eligibility, and a mere 9% supplied references for examination of peer-reviewed data. Another unfortunate consequence of DCTM is "physician shopping." Bozic and colleagues[4] found that patients exposed to DCTM were more likely to demand a specific surgery, approach, or implant and were less open to alternatives; in addition, they saw more than one surgeon before deciding on joint arthroplasty.

The effects of DTCM on resident and fellowship training require serious consideration. An emphasis on technology has come at the expense of learning the science and art of orthopedics.[8] Physicians in training are pressured both to produce more and to use whichever specific technique or product a patient requests.[4] Similarly, orthopedic surgeons are seeing job advertisements that read, "Training in robotic surgery or anterior approach is preferred." Employer pressure can have profound implications for residents and fellows, who may feel compelled to learn these techniques. To a large degree, residents and fellows learn by accompanying their mentors and closely observing their decision-making processes and interactions with patients. Decisions regarding fellowships should not be influenced by surgical techniques or implant choices but by the quality and breadth of clinical experience.

Authors' Disclosure Statement: The authors report no actual or potential conflict of interest in relation to this article.

DTCM likely will continue to shape all aspects of care. Claims made by physicians and hospitals are especially troubling because patients trust these sources. We face the challenge of reaffirming our commitment to patients and orthopedic surgeons. As the leader in musculoskeletal education, the American Academy of Orthopaedic Surgeons (AAOS) not only must provide educational material that is compatible with current technological media but must address current controversies and misleading claims. Toward that end, AAOS can expand its patient website, OrthoInfo, to include information on new technologies and surgical techniques pertaining to each musculoskeletal condition. Educating the public about risk factors for poor surgical outcomes is equally important in order to moderate unrealistic expectations and stimulate discussions on risks involved in unnecessary or potentially harmful technologies. The American Association of Hip and Knee Surgeons (AAHKS) has already embarked on this approach. Orthopedic surgeons should continue to abide by the standards of professionalism—maintaining the tenet of "First do no harm," resisting the temptations of consumerism, and giving patients accurate information. Taking these measures may help reduce physician shopping and strengthen the patient–physician relationship. We physicians are the guardians of patients' well-being. We also owe it to orthopedic surgeons in training to provide well-balanced, unbiased education. The focus of training should not be on techniques for gaining market edge but on learning evidence-based medicine and surgical principles. In our burdened healthcare system, curbing DTCM has the potential to decrease unnecessary use of resources and improve the quality of education and patient care.

Dr. Halawi is an Adult Reconstructive Surgery Fellow, and Dr. Barsoum is Associate Professor, Orthopaedic and Rheumatologic Institute, Cleveland Clinic, Cleveland, Ohio.

Address correspondence to: Wael K. Barsoum, MD, Orthopaedic and Rheumatologic Institute, Cleveland Clinic, 9500 Euclid Ave, A40, Cleveland, OH 44195 (email, klikaa@ccf.org).

Am J Orthop. 2016;45(6):E335-E336.

References

1. Bhattacharyya T, Tornetta P 3rd, Healy WL, Einhorn TA. The validity of claims made in orthopaedic print advertisements. *J Bone Joint Surgery Am*. 2003;85(7):1224-1228.
2. Woloshin S, Schwartz LM, Tremmel J, Welch HG. Direct-to-consumer advertisements for prescription drugs: what are Americans being sold? *Lancet*. 2001;358(9288):1141-1146.
3. Robinson AR, Hohmann KB, Rifkin JI, et al. Direct-to-consumer pharmaceutical advertising: physician and public opinion and potential effects on the physician-patient relationship. *Arch Intern Med*. 2004;164(4):427-432.
4. Bozic KJ, Smith AR, Hariri S, et al. The 2007 ABJS Marshall Urist award: the impact of direct-to-consumer advertising in orthopaedics. *Clin Orthop Relat Res*. 2007;(458):202-219.
5. Mason JB. The new demands by patients in the modern era of total joint arthroplasty: a point of view. *Clin Orthop Relat Res*. 2008;466(1):146-152.
6. Weinstein SL. Words from a "wise old hand"—guideposts for the future. Professor Stuart L. Weinstein. *Iowa Orthop J*. 2008;28:94-97.
7. Labovitch RS, Bozic KJ, Hansen E. An evaluation of information available on the internet regarding minimally invasive hip arthroplasty. *J Arthroplasty*. 2006;21(1):1-5.
8. Buckwalter JA. Advancing the science and art of orthopaedics. Lessons from history. *J Bone Joint Surg Am*. 2000;82(12):1782-1803.