Editorial Commentary: Surgeons Should Not "Underpromise" to "Overdeliver": High Preoperative Patient Expectations Correlate With Improved Orthopaedic Surgical Outcomes

Aman Dhawan, M.D., Associate Editor

Abstract: Despite our understanding of patient-specific, anatomic, and surgical factors that can influence surgical outcomes, there remains a significant amount of variability in patient satisfaction and outcome after any orthopaedic surgical procedure. This variability is in large part due to psychosocial factors. There is a growing volume of literature demonstrating the importance of psychosocial factors to include anxiety, depression, attitudinal factors, expectations, patient-perceived control, self-efficacy, knowledge, and expectations. Many of these factors are modifiable, and it is critical that we as providers understand the depth and breadth of these psychosocial factors, and their influence, on our patient's surgical outcomes. Surgeons should not "underpromise" to "overdeliver," because high preoperative patient expectations have a positive predictive value for improved orthopaedic surgical outcomes.

See related article on page 3250

There are a number of well-understood patient-specific, anatomic, and surgical factors that influence the surgical outcomes of orthopaedic surgical procedures.[1-3] Surgical training and research historically have focused on these factors, especially modifiable surgical technical factors that can improve our patient's objective surgical outcomes.[4] There is a growing body of literature that demonstrates, however, that despite factoring in demographic predictors, clinical factors, and surgical technique, there is still significant variability in patient outcomes after orthopaedic surgery. Much of this variability we are coming to understand is due to psychosocial factors, to include patient expectations.

A number of studies have demonstrated patient expectations to be a strong predictor of surgical outcomes.[5-7] All of us also know from personal experience that these expectations can be unrealistic and often challenging to manage. It is several times a week that I find myself in the situation of discussing realistic expectations and recovery timeline with a high school or college athlete who has torn their anterior cruciate ligament but expects to be back playing unrestricted contact sports at 4 or 5 months. The differences between surgeon and patient expectations has been well demonstrated. As this mismatch between expectation and outcome creates patient dissatisfaction, surgeons find themselves in positions in which they are often trying to temper these preoperative expectations. I am often concerned about the patient who preoperatively thinks they will be the exception to the rule in recovery time, function, and performance. This management of expectations often leads to a strategy of surgeon "underpromise but overdeliver," trying to sway the satisfaction equation to what we think as health care providers will better result in ultimately happy and satisfied patients. But is this strategy really the best way to optimize patient outcomes?

The author reports the following potential conflicts of interest or sources of funding: A.D. reports Consultancy for Smith & Nephew, Avenue Therapeutics; grants from Revotek, Department of Defense, National Institutes of Health, and Penn State University; payment from Smith and Nephew for lectures including service on speakers' bureaus; and Associate Editor, Arthroscopy Journal; committee member, AOSSM Publications committee; committee member, AANA Research Committee; Editorial Board OJSM; and Editorial Board SMAR. Full ICMJE author disclosure forms are available for this article online, as supplementary material.

0749-8063/19961/$36.00

https://doi.org/10.1016/j.arthro.2019.08.010

This month's issue of *Arthroscopy* includes the article "Is There an Association Between Preoperative Expectations and Patient Reported Outcome After Hip Arthroscopy for Femoroacetabular Impingement Syndrome?" by Chahla, Beck, Nwachukwu, Alter, Harris, and Nho.[8] The authors report that in their patient cohort, high preoperative patient expectations led to increased likelihood of achieving the patient-acceptable symptomatic state and minimal clinically important difference for 2 validated patient reported outcomes.[8] This is not what the authors expected. They hypothesized, as I think we all would, that greater preoperative expectation would be associated with lower visual analog scale satisfaction scores and worse outcomes. These authors found that high preoperative patient expectations, based on the validated Hip Preservation Surgery Expectations Survey, had a *positive* predictive value. Despite the author's and my initial surprise at these results, these perhaps should not be that astonishing.

Previous studies also have demonstrated the power of positive thinking and attitudinal factors in improving patient outcomes across a range of surgical procedures. The expectation of pain relief after total joint arthroplasty has been found to be associated with improvements in pain level and physical functioning.[9] In cardiac surgery studies, the ability to cope with pain and the rehabilitation, or self-efficacy, was found to be related to decrease use of postoperative analgesics and return to activities of daily living and social functioning.[10,11] Similarly an optimistic outlook has been demonstrated to improve postoperative function and decrease length of hospital stay.[12,13] Conversely, depression, anxiety, worry, anger, and hostility have all been demonstrated to predict worse postoperative outcomes, including pain and satisfaction.[14,15]

In many ways, it is logical that a positive outlook and attitude will positively influence a patient's surgical experience, postoperative recovery, and ultimately surgical outcomes. What we really are concerned about as surgeons should perhaps not be high preoperative expectations, but specifically unrealistically high expectations, including both high and low. We need to manage these unrealistic expectations but also use positive thinking, attitude, self-efficacy, and optimism to the patient's advantage. We do not want to squelch the fire. Rather we want to guide it, so it is productive with the patient feeling well educated, having perceived control, and an optimistic outlook with positive expectations.

References

1. Romeo AA, Hang DW, Bach BRJ, Shott S. Repair of full thickness rotator cuff tears. Gender, age, and other factors affecting outcome. *Clin Orthop Relat Res* 1999;367:243-255.
2. Oh JH, Kim SH, Ji HM, Jo KH, Bin SW, Gong HS. Prognostic factors affecting anatomic outcome of rotator cuff repair and correlation with functional outcome. *Arthroscopy* 2009;25:30-39.
3. Kowalchuk DA, Harner CD, Fu FH, Irrgang JJ. Prediction of patient-reported outcome after single-bundle anterior cruciate ligament reconstruction. *Arthroscopy* 2009;25:457-463.
4. Brown L, Rothermel S, Joshi R, Dhawan A. Recurrent instability after arthroscopic Bankart reconstruction: A systematic review of surgical technical factors. *Arthroscopy* 2017;33:2081-2092.
5. Cole BJ, Cotter EJ, Wang KC, Davey A. Patient understanding, expectations, and satisfaction regarding rotator cuff injuries and surgical management. *Arthroscopy* 2009;25:457-463.
6. Cole BJ, Cotter EJ, Wang KC, Davey A. Patient understanding, expectations, outcomes, and satisfaction regarding anterior cruciate ligament injuries and surgical management. *Arthroscopy* 2017;33:1092-1096.
7. Rossi MJ, Brand JC, Provencher MT, Lubowitz JH. The expectation game: Patient comprehension is a determinant of outcome. *Arthroscopy* 2015;31:2283-2284.
8. Chahla J, Beck EC, Nwachukwu B, Alter T, Harris JD, Nho S. Is there an association between preoperative expectations and patient reported outcome after hip arthroscopy for femoroacetabular impingement syndrome? *Arthroscopy* 2019;35:3250-3258.
9. Mahomed NN, Liang MH, Cook EF, et al. The importance of patient expectations in predicting functional outcomes after total joint arthroplasty. *J Rheumatol* 2002;29:1273-1279.
10. Bastone E, Kerns R. Effects of self efficacy and perceived social support on recovery-related behaviors after coronary artery bypass surgery. *Ann Behav Med* 1995;17:324-330.
11. Allen JK, Becker DM, Swank RT. Factors related to functional status after coronary artery bypass surgery. *Heart Lung* 1990;19:337-343.
12. Mahler HI, Kulik JA. Preferences for health care involvement, perceived control and surgical recovery: A prospective study. *Soc Sci Med* 1990;31:743-751.
13. Fitzgerald TE, Tennen H, Affleck G, Pransky GS. The relative importance of dispositional optimism and control appraisals in quality of life after coronary artery bypass surgery. *J Behav Med* 1993;16:25-43.
14. Iversen MD, Daltroy LH, Fossel AH, Katz JN. The prognostic importance of patient preoperative expectations of surgery for lumbar spinal stenosis. *Patient Educ Couns* 1998;34:169-178.
15. de Groot KI, Boeke S, vandenBerge J, Duivenvoorden HJ, Bonke B, Passchier J. The influence of psychological variables on postoperative anxiety and physical complaints in patients undergoing lumbar surgery. *Pain* 1997;69:19-25.