Older Patients' Unexpressed Concerns About Orthopaedic Surgery

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Background: As the U.S. population ages, orthopaedic surgeons will increasingly be required to counsel older patients about major surgical procedures. Understanding patient concerns or worries about surgery could help orthopaedic surgeons to assist their patients in making these decisions. The objectives of this study were to explore the nature of patient concerns regarding orthopaedic surgery and to describe how patients raise concerns during visits with orthopaedic surgeons and how orthopaedic surgeons respond.

Methods: As part of a study involving audiotaping of 886 visits between patients and orthopaedic surgeons, fifty-nine patients sixty years of age or older who were considering surgery were recruited to participate in semistructured telephone interviews at five to seven days and one month after the visit. Patients were asked about their perceptions of the visit and how they made their decision about surgery. These interviews were analyzed to identify patients' concerns with the use of qualitative content analysis and then compared with the audiotaped visits to determine whether these concerns were actually raised during the visit and, if so, how well the orthopaedic surgeons responded. Analyses based on patient race (black or white) were also performed.

Results: One hundred and sixty-four concerns pertaining to (1) the surgery (anticipated quality of life after the surgery, the care facility, the timing of the operation, and the patient's capacity to meet the demands of the surgery) and (2) the surgeons (their competency, communication, and professional practices) were identified. Patients raised only 53% of their concerns with the orthopaedic surgeons and were selective in what they disclosed; concerns about the timing of the operation and about the care facility were frequently raised, but concerns about their capacity to meet the demands of the surgery and about the orthopaedic surgeons were not. Orthopaedic surgeons responded positively to 66% of the concerns raised by the patients. Only two concerns were raised in response to direct surgeon inquiry.

Conclusions: Patients raised only half their concerns regarding surgery with orthopaedic surgeons. Orthopaedic surgeons are encouraged to fully address how patients' capacity to meet the demands of the surgery, defined by their resources (such as social support, transportation, and finances) and obligations (to family members, employers, and religion), may impinge on their willingness to accept recommended surgery.

The decision to undergo surgery is never frivolous. Older adults making decisions about elective orthopaedic surgery can find these decisions particularly difficult and confusing because many perceive surgery as risky simply because of their age, even though comorbid conditions are often more important surgical risk factors than chronological age. Orthopaedic surgeons play a vital role in counseling patients about their decisions regarding surgery and will be called

on increasingly in this capacity as the U.S. population ages and a growing number of older patients consider major procedures such as joint replacement. To assist older patients in their decision-making, orthopaedic surgeons can best serve their patients by appreciating and addressing concerns and worries about surgery.

Unfortunately, reports in the primary care literature indicate that patients may not always share their ideas,

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concerns, expectations, or desires for action with physicians¹⁻⁴. Studies suggest that patients do not overtly express their true concerns at up to 75% of acute care visits¹. Unexpressed concerns may lead to problems in patient care^{3,5-8}; for example, they may become subtle barriers to the acceptance of optimal treatment. If patients have unfounded concerns but do not express them, physicians have little chance to correct or modify them. Likewise, unexpressed concerns may contribute to breakdowns in communication that are frustrating for both physicians and patients.

Little is known about the nature of concerns felt by patients considering surgery, how concerns are raised, and how well surgeons respond. We explored these questions as they relate to orthopaedic surgery because of the enormous and growing impact of musculoskeletal conditions⁹.

Materials and Methods

Sampling

We used a subset of data from a study of informed decision-making that included audiotapes of routine office visits between 886 older patients (sixty years of age or more) and eighty-nine orthopaedic surgeons in a large Midwestern American city and part of a neighboring state. The visits were recorded between March 2003 and February 2004. Institutional review board approval for the study was obtained from all participating hospitals as well as the University of Toronto and NORC (the National Opinion Research Center). Informed consent was obtained from patients and orthopaedic surgeons prior to their participation.

The study sample was identified in the following manner. A "complex decision," defined as a decision about a diagnostic or treatment intervention that is high risk, controversial, or otherwise warrants substantial discussion (e.g., surgery), was dealt with during 206 (23%) of the 886 patient-orthopaedic surgeon visits. We asked all eligible black patients who were considering a complex decision to participate in follow-up telephone interviews. For each black patient who agreed, we sought a white patient matched for educational level (at least a high-school education [high] or less than a high-school education [low]). This sampling strategy was based on (1) evidence of racial disparities in the use of orthopaedic surgery procedures¹⁰⁻¹³ and the possibility that differences in concerns between black and white patients may contribute to disparities and (2) the assumption that educational level may influence the willingness to raise concerns with orthopaedic surgeons. The result was a set of fifty-nine patient-surgeon visits: twenty-seven involving white patients (twelve with a high and fifteen with a low educational level) and thirty-two involving black patients (seventeen with a high and fifteen with a low educational level).

Data Collection

Each participant took part in in-depth semistructured telephone interviews at five to seven days and one month after their visit with the orthopaedic surgeon. An experienced interviewer from NORC conducted all interviews.

In the first interview, participants were asked about their perceptions of (1) the content of their discussion with the orthopaedic surgeon; (2) the orthopaedic surgeon's manner; (3) their opinion of the "rightness," or appropriateness, of surgery; (4) their readiness to make a decision; and (5) the process of decision-making (e.g., how the decision was arrived at and what factors facilitated and/or hindered the making of the decision). The second interview focused on determining whether the patient had made a decision regarding the proposed surgery and, if so, what had been decided.

Analysis

Analysis was carried out in several stages. First, qualitative content analysis was used to examine the patient-orthopaedic surgeon visits and telephone interviews for evidence of patient concerns about orthopaedic surgery. Qualitative content analysis is the process of identifying, coding, and categorizing patterns in textual data^{14,15}. Coding is the means of generating concepts from and with the data, and codes are labels that describe, in an abbreviated way, different topics or themes in the data. We began by identifying key themes in relation to patient concerns, reviewing the data several times, and adding and changing codes as new topics and relationships were identified. The credibility and rigor of the analysis were aided by continual reexamination of the interview data throughout the research process and by ongoing discussion with the research team.

Concerns were defined as something closely associated with orthopaedic surgery that patients perceive to be negative or potentially negative in some way. These concerns might or might not be sufficient to deter an individual from pursuing surgery. Concerns could be indicated *directly* (through words such as "concern," "fear," "worry," and "problem," or phrases such as "I'm concerned about..." or "I wanted to know about...") or *indirectly* (by the patient talking about inconvenience or interference; expressing dislike, fear, reluctance, doubt, or dissatisfaction; or seeking reassurance).

Second, we listened to the audiotaped visits to determine whether patients actually raised their concerns with the orthopaedic surgeon. Evidence of raising a concern included any of the following (Table I): (1) a request for an account or explanation; (2) a statement of a diagnostic or treatment preference; (3) an account of a negative anecdote; and (4) a statement of a problem, worry, concern, or conflict.

Third, we listened again to the audiotapes to examine the conversation preceding the identified concerns in order to describe the context in which these concerns were raised. We wanted to determine if patients regularly raised their concerns in response to direct inquiries by the orthopaedic surgeon intended to solicit them or as freestanding offers of information during other parts of the visit.

Finally, using a modified version of a coding system designed to assess patient clues, we evaluated the quality of the orthopaedic surgeons' responses to the concerns that the patients raised during the visits⁷. Responses were classified as positive acknowledgment, inadequate acknowledgment, or

TABLE I Categories of Evidence of Concerns During Visits with Orthopaedic Surgeons

Type of Evidence	Example
Request for explanation or account	Patient: And what's to guarantee that [unsatisfactory surgical outcome] won't happen again?
Statement of diagnostic or treatment preference	Patient: I had an MRI recently on my neck...and I hate to do that again...so soon.
Account of a negative anecdote	Patient: Well, you know when I got hit by the car I had it [medical ID bracelet] on... Surgeon: Mm-hm. Patient: And they started an IV and tried to put Demerol in it and I was just—you know, I also had a concussion [laughs]. Surgeon: You need a tattoo: "No Demerol!" Patient: Yeah, "No Demerol." Well, they couldn't find a vein. Surgeon: Probably thank goodness for that! Patient: Well yeah, that's when I really sort of paid attention to what they were doing!
Statement of a problem, worry, concern, or conflict	Patient: I've got a problem though. I'm going to be confirmed Easter Sunday and I wanna—you know, I have classes to go to.

negative. The orthopaedic surgeon was considered to have provided positive acknowledgment when he or she (1) expressed reassurance or encouragement, (2) expressed support in relation to the patient's preferences, or (3) modified plans in order to accommodate a concern. Inadequate acknowledgment included instances in which the orthopaedic surgeon (1) only minimally acknowledged the patient's concern (e.g., with continuers such as "yeah," "mm-hm," and "right"); (2) acknowledged a concern but failed to address it in a meaningful way (e.g., without incorporating any element of a positive response, such as offering reassurance, accommodating the concern, or assisting in formation of a plan to address it); and (3) acknowledged the concern prematurely, without fully exploring its nature. Negative responses included (1) inappropriate humor, (2) denial of a concern, and (3) use of terminators (e.g., topic changes). Inappropriate humor, even if followed immediately by the orthopaedic surgeon providing reassurance, remained coded as a negative response.

Results

Types of Patient Concerns

A total of 164 concerns were identified. Figure 1 shows the results organized into two overarching categories: concerns about surgery and concerns about surgeons.

Concerns About Surgery

The overwhelming majority of the concerns (84%) were related to the surgery itself. These included concerns about the anticipated quality of life as a result of the surgery (ninety-one of the concerns), the care facility after the surgery (seven), the timing of the surgery (sixteen), and the patient's capacity to meet the demands of the surgery, including those related to the recovery period (twenty-four).

Concerns about the anticipated quality of life reflected uncertainty about well-being following surgery. Three subcategories within the anticipated-quality-of-life category were

identified: threats to physical well-being, threats to social well-being, and potential for improvement.

Patient concerns about threats to physical well-being relate to the ways in which surgery could cause bodily harm, either as a direct result of "going under the knife" or because of pain or medical error. One patient's description of surgery as "a very scary thing" captures this concern well:

I was scared to death! You know any time you have surgery, it's a scary situation because there are problems that can come up with anesthesia or something can go wrong. And especially with the spine. You think about being paralyzed afterwards, which I knew was one of the risks and so it was a very scary thing.

The possibility that surgery could pose a threat to social well-being by interfering with social activities or causing inconvenience in patients' lives was also a concern. In particular, restricted postoperative mobility was a concern for patients who valued involvement in recreational and family activities:

I know too many people who just have a lot of surgery and they're always laid up; they're always recovering. These are supposed to be the golden years, and I'm still pretty mobile and I'd like to stay that way.

Inconvenience was another issue:

It's just wearing the brace for six months and just making sure that, you know, you don't bend the wrong way, you don't pick up anything; you know, it's that fuss.

Concerns reflecting underlying doubts about the potential of the surgery to improve the patient's condition were also expressed. For some, these doubts related to whether or not they were an appropriate or "good" candidate for surgery in light of such factors as their age or comorbid conditions, which were thought to work against them and potentially limit the success of surgery. Others had doubts about the efficacy of a recom-

Figure 1. Types of Patient Concerns

Fig. 1
Types of patient concerns.

mended surgical procedure (e.g., the “newness” of a procedure) and the risks of failure related to the procedure itself:

And of course the other trepidation is hoping that it will work! Back surgery is such a—you know, you hear so many different stories about the success rates.

Finally, some patients’ doubts about their potential for improvement were linked to their own or others’ previous surgical experiences; in particular, the less-than-successful experiences of others appeared to powerfully shape some participants’ views of their own potential for improvement following a recommended surgery.

Concerns about logistical aspects of the surgery revolved around the timing of the surgery and the care facility where the operation or postoperative rehabilitation was to take place. Concerns about timing often overlapped with other concerns, such as one’s social well-being and ability to take part in planned social activities:

I would say that [the selection of the surgical date] was pretty much what we discussed except I was really anxious to

know if I had to have surgery—what’s the recovery period—because I want to go to London at Christmastime.

Patients also expressed concerns about their capacity to meet the demands of the surgery—i.e., the ways in which they felt inadequately prepared for and unable to cope with the surgery and the postoperative recovery period. Patients perceived this capacity to be associated with resources and obligations. Concerns about resources related to the lack of those things that would enable them to handle the demands of surgery, including social support, transportation, finances, and physical or psychological health. Concerns about obligations related to duties that interfered with their ability to cope with surgery, including obligations to family members and employers and those associated with their religion. One patient described how her capacity to even consider surgery was compromised by her obligations to her husband, who had substantial health-care needs following several strokes:

That I will talk to my doctor about [when surgery becomes necessary] and that I haven’t even thought about it because I

TABLE II Patient Concerns Noted During Visits with Surgeons

	No. of Concerns Raised During Visit/Total No. of Concerns Identified*	Percentage of Identified Concerns That Were Raised, by Category
Concerns about surgery	80/129	62%
Logistical aspects	17/20	85%
Care facility	6/7	
Timing	11/13	
Anticipated quality of life	53/86	62%
Threats to physical well-being	10/13	
"Going under the knife"	13/20	
Medical error	30/53	
Pain	21/36	
Threats to social well-being	2/5	
Potential for improvement	7/12	
Capacity to meet demands of surgery	10/23	43%
Resources (social support, physical and psychological health, transportation, financial)	5/12	
Obligations (family members, employers, one's religion)	5/11	
Concerns about surgeons	3/26	12%
Competency	2/10	
Communication	0/9	
Professional practices	1/7	
Total	83/155	54%

*The total number of concerns was eighty-three. Ten concerns that were raised by third parties during the visit were included because third parties were considered to be acting as patient proxies. Three concerns not raised during the visit were included because patients reported discussing them with the surgeon in the interim period between their visit and the follow-up interview. Four concerns related to events that occurred after the surgical visits were excluded because they could not be addressed during the visit itself. Three concerns expressed first by the surgeon during the surgical visit and then later by the patient in the follow-up interview were excluded because they seemed to reflect a fundamentally different category of concern. The total number of patients was fifty-seven. Only fifty-seven of the original fifty-nine patients were included in this analysis. One patient was excluded on the basis of not meeting the sampling criterion of considering a complex decision, and the other was excluded because the audiorecording of the affiliated surgical visit was missing.

just started again with my husband's physical therapy. And we're going twice a week, so right now I've pushed mine [her health-care needs] all aside so we do what's good for my husband. So right now, mine is on hold.

Concerns About Surgeons

Sixteen percent of the concerns were related to surgeons, either orthopaedic surgeons in particular or surgeons in general. These included doubts about the competency and communication skills of the surgeon as well as concerns about professional practices such as ageism and the perceived tendency of surgeons to advocate surgery as the only treatment option. One patient commented explicitly on the surgeon's level of experience with a contemplated procedure:

Patient: I'd rather have somebody, you know—if I don't go back to him to do it—I might NOT if he's never done it.

Interviewer: That might be a good question to ask. You're right.

Patient: 'Cause when I had my knee done, they—somebody suggested I ask "How many knees do you do in a year?" If they say they do one or two, then you don't want to go to him. So the man I asked said: "Oh, about 200." So that would be part of my decision to go and have him do it.

Comparison According to Race

The only significant finding demonstrated by the comparison of concerns according to race involved the subcategory of threats to physical well-being; white patients were 4.2 times more likely to express a concern about their physical well-being and "going under the knife" than were black patients ($p = 0.0123$; odds ratio = 4.19, 95% confidence interval = 1.32 to 13.28).

Evidence of Patients Raising Concerns During the Visit

Patients raised about half of their concerns (eighty-three of 155) during the visits with their orthopaedic surgeons (Table

TABLE III Conversational Context Preceding Raised Concerns*

Without explicit question posed by surgeon	
Stating or describing treatment/diagnostic testing recommendations or options (including potential risks)	39
Offering to answer questions	1
Explaining diagnosis	5
Addressing a different surgical concern	10
Long pause	2
With explicit question posed by surgeon	
Seeking acceptance of a treatment/diagnostic recommendation	5
Seeking patient preferences/information (i.e., about previous operations, comorbid conditions)	19
Direct inquiry about concerns	2

*See Table II for inclusions and exclusions.

II). Most interesting was how selective patients were about what they raised with these surgeons; they raised 85% (seventeen) of the twenty concerns related to the logistics of having surgery (concerns regarding the care facility or the timing of the operation) and 62% (fifty-three) of the eighty-six concerns pertaining to the anticipated quality of life but only 43% (ten) of the twenty-three concerns about their capacity to meet the demands of the surgery and 12% (three) of the twenty-six concerns about surgeons.

Conversational Context in Which Patients Raised Concerns

Only a third of the concerns expressed during the visits were raised in response to explicit questions posed by the orthopaedic surgeon (Table III). In fact, only two concerns were raised in response to direct surgeon inquiries like "Do you have any questions or concerns?" The most concerns (thirty-nine) were raised by the patient when the orthopaedic surgeon was describing treatment recommendations and options.

Responses of the Orthopaedic Surgeons to Patient Concerns

Orthopaedic surgeons responded positively to 66% (fifty-three) of the eighty concerns expressed by their patients (Table IV). Reassurance, occasionally involving humor, was the dominant positive response employed by the orthopaedic surgeons. The surgeons reassured patients about a range of issues, particularly safety concerns related to the surgery. Statements of reassurance took forms such as "you should be able to do okay," "it's [postoperative pain] not too bad," and "there's still a slight risk [of tainted blood] but not as great as it used to be." Two types of reassurances were identified (Table IV): reassurance accompanied by explanation (the response to twenty-seven concerns) involved attempts to alleviate patient concerns by providing an explanation or justification, while reassurance without explanation (thirteen) involved more perfunctory statements intended to alleviate

patient concerns but with little or no accompanying explanation. Only one positive response included an explicit statement of empathy.

Orthopaedic surgeons responded inadequately to 29% of the concerns. Minimal acknowledgments were most common and particularly apparent in the context of discussing patient concerns about their capacity to meet the demands of the surgery. In the dialogue below, the patient's description of how his wife's cancer influenced his ability to proceed with surgery is met with minimal tokens of acknowledgment from the orthopaedic surgeon ("mm-hm," "yeah," "right"). In the face of such minimal response, the patient does not pursue the topic further:

Surgeon: Yeah, I mean this is no hurry. You can think about it, but it's pretty involved to do something.

Patient: Yeah. Well, my wife is upstairs. She's—ovarian cancer, and that's really why I decided to come down here.

Surgeon: Mm-hm.

Patient: We've got to get her squared away a little better first.

Surgeon: Right.

Patient: So I couldn't do anything until January.

Surgeon: Yeah.

Patient: But um...I definitely am gonna give it strong consideration because I'd like to get back to some sense of normalcy...I mean from going to tennis to being inactive is really...

Surgeon: Right.

Some orthopaedic surgeons' responses acknowledging the existence of the concern but expressing little more seemed to be a way of deflecting the issue rather than entering into a discussion about it. In the extract below, it can be noted how the surgeon acknowledges the patient's concern related to se-

TABLE IV Surgeon Responses to Patient Concerns*

Positive acknowledgment	
Reassurance	40
With explanation	27
Without explanation	13
Supportive/accommodating	12
Empathy	1
Inadequate acknowledgment	
Minimal acknowledgment	13
Failure to address concern	8
Premature acknowledgment	2
Negative response	
Inappropriate humor	3
Denial	0
Terminator	1

*See Table II for inclusions and exclusions. Three additional concerns were excluded in this analysis because the surgeon's response was inaudible and thus the total number of concerns was eighty.

curing transportation but offers no practical advice about how she might address the issue:

Surgeon: You would go home. So the therapy would be either as an outpatient at a nearby facility or somebody going to your house. Now if somebody comes to your house, it's not as good I think as when you go to a facility.

Patient: I have transportation problems to begin with.

Surgeon: Yeah, well, you've got to add all of the things up together.

Patient: I don't have any way to get around.

Similar statements deflecting or redirecting decision-making responsibility to the patient without attempting to address the stated concern included: "Yeah, I mean it would be basically up to you" and "So what are we gonna do here?"

Negative responses were rare and included a single instance of premature termination of an emotional discussion and three instances of inappropriate laughter.

Discussion

Our analyses of audiotaped patient-surgeon visits demonstrated that orthopaedic surgeons generally do a good job at responding to patient concerns when they are raised. However, when we compared the audiotaped visits with follow-up interviews, we found that patients raised only half of their concerns about orthopaedic surgery in their face-to-face encounters with orthopaedic surgeons. Patients were also highly selective about the concerns that they raised; concerns about logistical aspects of surgery (about the care facility and the timing of the operation) and the anticipated quality of life after the surgery were often expressed, while concerns about their capacity to meet the demands of the surgery (particularly in the postoperative period) were raised less often and concerns about surgeons were rarely raised. This "selective disclosure"¹⁶ provides valuable insight into concerns that patients may be reluctant to express.

The finding that patients expressed their concerns about surgeons only 12% of the time is not surprising because speaking directly to a surgeon about his or her communication skills or technical competency is likely to be awkward. Patients may even fear negative repercussions in terms of their subsequent care if they were to raise such concerns. Orthopaedic surgeons might do well to consider the potential ramifications associated with concerns of this nature; for example, recent work from The Netherlands showed that 30% of new patients visiting an orthopaedic surgical outpatient clinic were seeking a second opinion¹⁷ and that these patients were often motivated not by doubts about the competency of the treating consultant but by a lack of trust in, or dissatisfaction with, the consultant who provided the first opinion. Because the number of second-opinion consultations in orthopaedic surgery is increasing rapidly^{18,19}, it is important to consider the patients' motivations for seeking them. When it seems appropriate to do so, orthopaedic surgeons might consider reassuring patients that they have a good deal of experience with a contemplated procedure.

Patients also hesitated to express concerns about their capacity to meet the demands of the surgery. We speculate that this may be related to the pace of the visit or the belief that orthopaedic surgeons are neither interested in, nor can do anything concrete about, these concerns (and thus there is no point in drawing attention to them). However, some concerns about capacity, particularly those about coping in the post-operative period, may be modifiable with support from health-care professionals such as social workers, who have extensive knowledge about social and community supports and resources. For example, one patient in our study was deferring surgery because of transportation problems that probably could have been solved with community or family assistance. Knowing that patients are less likely to bring up concerns about their capacity to face the demands of surgery, orthopaedic surgeons could routinely provide opportunities to discuss these issues. Once capacity-related problems are understood, the health-care team may be able to provide solutions or offer assistance with problem-solving.

Should orthopaedic surgeons be aware of all patient concerns, including those that are not modifiable? We suggest that the answer is "yes" because, even when surgeons cannot resolve issues, there are benefits to understanding them, including the potential therapeutic benefit of facilitating their expression, listening, and offering empathy or reassurance²⁰. The fact that only one orthopaedic surgeon in this study responded to a patient's concern with an explicit statement of empathy deserves mention here because it highlights a missed opportunity for orthopaedic surgeons to provide emotional support and foster patient satisfaction²¹. Proactively introducing a discussion of concerns demonstrates a willingness to engage in a dialogue with patients that supports decision-making. Particularly when patients are deferring surgery, such discussions might be crucial to uncovering unexpressed concerns that have led the patient to decide, for the moment at least, to forego surgery.

Only two of eighty-three raised concerns were brought up in response to intentional attempts on the part of the orthopaedic surgeon to solicit them through questions such as "Do you have any questions or concerns?" To maximize the effectiveness of direct inquiries to solicit concerns near the closing of the visit, orthopaedic surgeons should consider both the delivery and the wording of their questions. In terms of delivery, surgeons should halt competing activities (e.g., writing in the medical records) and orient their body and gaze toward the patient. In terms of wording, orthopaedic surgeons should grammatically design their questions so as not to bias the patient's responses²². This point is surprisingly relevant since something as simple as a single word difference in the phrasing of an inquiry about concerns can exert a significant effect on the number of concerns expressed. A recent randomized clinical trial in primary care demonstrated that the question "Is there *something* else you want to address in the visit today?" was more effective in eliciting patient concerns than the question "Is there *anything* else you want to address in the visit today?"²³ Importantly, asking about additional con-

cerns in this way did not increase the length of the visit or generate new concerns. This finding strongly suggests that orthopaedic surgeons should use the "something else" form of inquiry to facilitate elicitation of patient concerns.

In addition to paying attention to the way that questions about concerns are worded in the final stages of a visit, orthopaedic surgeons should be aware that patients' concerns may become apparent at any time during the visit and not only in response to direct inquiries. In this study, a common time at which concerns were raised was after counseling about recommendations and options for treatment or diagnostic testing. The point here is that orthopaedic surgeons need to listen closely for concerns throughout the visit, not just at the beginning and the end.

Finally, our observation that white patients were 4.2 times more likely to express a concern about physical well-being than were black patients requires consideration. This finding is consistent with that of Lipson and Dibble²⁴, who remarked that "African Americans [are] generally reluctant to share personal and family issues with non-family members, including health professionals. . . . Younger persons tend to be more open than older persons are about their health problems." In view of this, orthopaedic surgeons should consider offering their black patients clear opportunities to discuss concerns about physical well-being.

Our study had limitations, the most notable of which is that we sought evidence of patients raising concerns with orthopaedic surgeons in the context of a single visit. The surgeons may have had an opportunity to deal with some concerns at prior visits. At the same time, some patients may have been deferring surgery, in which case active concerns may well have needed to be discussed more than once. A second limitation is our focus on orthopaedic surgery only. We believe, however, that the pattern of selective disclosure of concerns described here is likely similar to that in other surgical subspecialties. Additional research will be required to confirm the applicability of these findings beyond the orthopaedic surgery context. Finally, because our sample was restricted to English-speaking individuals, we are unable to comment on the concerns of those who speak other languages. It is possible that individuals who do not share a language with their orthopaedic surgeon could have additional or different concerns about surgery and surgeons than have been described. Despite these limitations, the results reported here could form the basis of a checklist of common concerns about orthopaedic surgery that could be used routinely by patients to facilitate discussions with orthopaedic surgeons around those concerns that are salient to them as individuals.

We concluded that, when patients raise concerns, orthopaedic surgeons generally do a good job at responding. Yet, many patient concerns appear to be unexpressed. Orthopaedic surgeons should be aware that patients are more likely to raise their concerns during discussions of treatment recommendations and options than in response to direct surgeon inquiries. Our study suggests opportunities and techniques for eliciting concerns that might otherwise prevent patients from receiving appropriate surgical care. To facilitate the expression of concerns that patients systematically tend *not* to disclose, we recommend that surgeons fully address how patients' capacity to meet the demands of the surgery, defined by their resources (such as social support, transportation, and finances) and obligations (to family members and employers), may impinge on their willingness to accept recommended surgery. We also suggest that, when making direct inquiries to solicit patient concerns near the closing of the visit, orthopaedic surgeons should halt competing activities, orient their body and gaze toward the patient, and use the "something else" form of inquiry (e.g., "Is there something else you want to ask me about your condition/this surgery/this treatment plan?"). Finally, when appropriate to do so, orthopaedic surgeons should reassure patients that they have a good deal of experience with the contemplated surgical procedure. ■

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