How patient-centred care is changing orthopaedics

Patient-centred medicine is an approach to medical care that emphasises the patient experience. Treatment outcome measures reflect this experience, and outcomes are measured by obtaining patient feedback. Central to this type of care is the patient-physician relationship. Communication, physician empathy, and shared decision making are key components of this relationship. Patient-centred care is correlated with better patient outcomes across medical specialties and higher patient perceived quality of care. Payors are now using patient-centred quality measures in their physician reimbursement schedules.

Patient-centred medicine is a term much bandied about. It is used as a marketing slogan on billboard advertising in America and is discussed by diabetologists in Thailand. It is employed by primary care doctors in patient-centred medical homes, and specialists such as orthopaedic surgeons are increasingly using this mode of care as well. Over the last few decades, patient-centred care has been clearly defined in the medical literature, and it is a promising and expanding type of care delivery. It has been shown to improve patient satisfaction rates and treatment outcomes and, moreover, can be employed by physicians working across different specialties. Patients everywhere in the world appear to respond well to patient-centred practitioners.

Patient-centred care replaces our current physician-centred system with one that revolves around the patient. Effective care is generally defined by, or in consultation with, patients rather than by physician-dependent tools or standards. As an example, the Harris hip score (HHS), one of the better and most widely employed tools for evaluating surgical results, does not include any evaluation of patients' satisfaction with their operative results. The HHS is now widely used by many orthopaedists to evaluate outcomes following hip arthroscopy. The inherent limitations of this approach are perhaps best illustrated by example. About a year ago, I assumed care of a middle-aged woman who had undergone hip arthroscopy for femoro-acetabular impingement (FAI). She continued to

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be symptomatic and was dissatisfied and disappointed with her surgical results. Her assessment of the arthroscopy was markedly different from that of her surgeon. In his office notes, her surgeon judged that the surgery was a success mostly due to a good HHS. While the score recorded was reasonably accurate, it in no way correlated with the experience of this patient. After years of use, it was not until 2012 that a study undertaken in Cambridge, UK actually compared HHS results with patient satisfaction rates from hip arthroscopy.[1] The results of the study were decidedly mixed with many satisfied patients scoring fair or poor results and some unsatisfied patients scoring good or excellent results.[1] While it may seem self-evident, the point here is that, as a profession, doctors should recognise that patients themselves know best how well their health providers are meeting their needs. It is therefore the patient's opinion of his or her care that best assesses outcome and satisfaction. Traditional physician-derived tools often fail to fully capture the patient experience.

This fundamental tenet of patient-centred care was tested by Stewart et al[2] in Canada in 2000. Experts studied audio taped doctor-patient interactions while patients also rated these same interactions. Expert opinion could not be correlated with positive outcomes, but patient-perceived patient-centred care correlated with: 'better recovery from their discomfort and concern, better emotional health two months later, and fewer diagnostic tests and referrals.'[2] This same phenomenon can be seen when studying physician empathy. For instance, in one American study, there was no significant agreement among patients and therapists when they both used the same scale to rate therapist empathy, and only the patients' ratings of their care correlated significantly with outcome measures.[3] Similarly, researchers at Thomas Jefferson University developed the Jefferson Scale to test physician empathy. Physicians rated their own empathy, and the scale could not be correlated with improvements in patient care. The scale was deemed a good first step and has value to categorise doctors, but was not successful enough. The researchers then further developed their scale and refined the concept by developing the Jefferson Scale of Patient Perceptions of Physician Empathy. A similar study was undertaken with a scale administered to patients. Suddenly, by scoring patient perceptions instead of relying on provider-generated data, the scale became useful for predicting outcomes.[4]

This dichotomy between patient perceptions of their own care and that of their doctors extends to orthopaedics and surgical results. This phenomenon is vividly illustrated in a recent study of complications after spine surgery by Mannion et al.[5] It has long been known that patients report surgery complications at rates far greater than those reported by their surgeons. This has been observed for both hernia and spine surgery.[6,7] The recent Swiss study[5] of patients undergoing lumbar surgery has confirmed this gap, but it has also shown something much more peculiar. This study reveals that patients and their surgeons see complications and surgical results quite differently. In this particular study, both surgeons and their patients individually reported surgical complications and their severity. Of the patients who reported complications, 71% of the time the surgeon did not report one, while in 61% of patients for whom the surgeon reported a complication, the patient did not report one.[5] In other words, patients and their surgeons had very poor agreement on the fundamental question of whether a surgery had resulted in a complication. Furthermore, just over half of patient-reported complications, including many that the surgeon did not recognise as a problem, were ranked by patients as very or extremely bothersome. There were some areas of agreement however; surgeons focused on technical occurrences, such as a dural tear, while patients focused on symptomatology, for example, postoperative sensory disturbances were the most common patient-reported complication. As one would expect, patient-reported complications showed a significant correlation with outcome and patient satisfaction.

Reaction to this study has varied, but at least some authors suggest that patients are too subjective to report 'genuine, operative complications'.[8] However, it is widely held that patients are the best judge of the success of elective surgery, especially a surgery performed for pain relief. Mannion et al[5] expressed caution that 'these [patient reported] complications are neither infrequent nor inconsequential as far as the patient is concerned.'

COMPONENTS OF A PATIENT-CENTRED APPROACH

The first step in understanding patient-centred care is understanding that patients must be asked to rate or judge their health care; we as providers often believe that we know everything about our patients and their care. The truth is that we are simply unable to accurately assess our patients' perceptions of their care – what is important to them, how well we are delivering the care they need, and what factors in our care improve outcomes – without asking our patients directly for their feedback. There is a foundational and inevitable difference in outlook between those of us wielding the scalpel, medication or stethoscope and the patients who are subject to their effects. We need to attempt to evolve from 'what's the matter' with our patients to 'what matters' to our patients.

The second fundamental tenet of patient-centred care concerns the relationship and interaction between doctors and our patients. A few years ago, a young well-educated woman asked for my help in treating a metastatic lesion of her femur. Her primary malignancy was lung cancer. During the course of treatment, she related to me that she had, early on, seen a respiratory physician for her symptoms. He had performed pulmonary function tests, prescribed inhalers, and told her to return if her symptoms did not improve. She never went back, and the cancer was later found by another doctor, by which time it was metastatic. In such situations, patient advocates tend to blame the doctor for his treatment and inability to diagnose the problem while physicians point to the patient's not following up despite instructions to do so. However, the underlying problem in this tragic example is the lack of a relationship between the patient and her doctor. This patient never felt any personal connection with her

physician. From her point of view, the visit was nothing more than an expensive waste of time, and therefore she did not return for further treatment. This lack of relationship significantly influenced her health decisions in the same way it impacts all patients.

In reality, the relationship between a patient and his/her doctor greatly determines both the patient's treatment outcome and a patient's satisfaction with their care. Any attempt to ignore this relationship when measuring the effects of care is necessarily artificial and causes incomplete results. What matters to patients is good communication from their doctor, a feeling of a personal relationship with their physician, and a degree of empathy regarding their medical problems.

Patients desire and respond to a personal relationship. Researchers in Oregon, USA,[9] have shown an association between patients who generally see the same doctor and better outcomes, better preventive care and fewer hospitalisations. Little et al[10] demonstrated that a personal relationship between patient and doctor and a feeling of partnership led patients to feel more satisfied and reduced their symptomatology. Based on their results they warned that: 'If doctors don't provide a positive, patient centred approach patients will be less satisfied, less enabled, and may have greater symptom burden.'[10]

Another component of patient-centred care is provider empathy. It too improves results and leads to better outcomes. A common outcome measure in patient-physician interaction is diabetes control which can be measured objectively by evaluating Hb A1c levels. Researchers in Philadelphia, USA,[11] showed that patients of physicians with high patient-evaluated empathy scores enjoyed significantly better control of their diabetes, as measured by haemoglobin A1c, than patients of physicians with low empathy scores did. Not only can empathy improve objective outcomes, it also improves patient satisfaction. A Korean study of 550 patients demonstrated an association between physician empathy and both better patient compliance and higher patient satisfaction rates. They found that patient-perceived provider empathy correlated with perception of physician expertise, trust, and information exchange. In addition to the expected increased levels of trust that empathic physicians engender in their patients, patients also perceived them to be more expert, and they also felt more satisfied with the care that they received.[12] This result is similar to that found in studying patients afflicted with cancer. Researchers in Paris, France have found that physician empathy is associated with greater patient satisfaction and lower levels of emotional distress.[13] While the disease under study here was cancer, from a personal perspective, speaking as a cancer survivor myself, I believe the effects of empathy seen in this study would also be evident in any group of patients saddled with long treatment courses marked by emotional ups and downs. Multiple severe injuries in trauma patients, those patients coping with significant operative complications, such as an infected total joint replacement or failed spinal surgery, undergo similar treatment burdens of multiple clinic visits and operative episodes as well as the socioeconomic effects of receiving long-term medical care. Finally, empathy should not be seen as an inviolable personality trait. Different empathy training techniques are being developed for doctors, and a group in Boston, USA, has developed a series of short training modules. They recently studied medical residents, including orthopaedic surgeons, and found significant improvement in patient-perceived provider empathy after a relatively brief training course.[14] We can all learn to be empathic.

COMMUNICATION: AT THE HEART OF PATIENT-CENTRED CARE

No aspect of the doctor-patient relationship has been as intensively studied as has physician-patient communication. According to a recent report from the Institute of Medicine, over 80% of patients strongly agree that they want their provider to listen to them and want full information about their care, no matter how uncomfortable or unpleasant. Unfortunately, this same survey found that fewer than half of all patients feel that their doctor takes the time and asks the necessary questions to understand their goals and concerns.[15] Furthermore, according to this report, patients whose providers listen to them, elicit their patients' goals and concerns, and fully explain all available options, are, among other things, three to five times more satisfied with their treatment and doctor. However, much more is at stake than patient satisfaction rates. Henbest and Stewart[16] from South Africa report that patients whose physicians ascertain the specific reason for their visit and then specifically check to be sure that their patients' concerns have been resolved experience a reduced symptom burden. Researchers in Thailand have shown good communication and provider empathy result in better diabetes control, greater compliance with the treatment regimen, and reduced symptoms.[17] Interestingly, no new expensive drugs or monitoring equipment were needed to make this improvement; rather, a better doctor-patient relationship delivered results. A further study of 750 US patients revealed that physicians' failure to discuss patient diagnosis and their prognosis was the most common cause of unmet patient expectations and resulted in poorer symptom relief and functional outcomes.[18] Researchers in Seattle, USA, studied over 1000 patient encounters, including many involving orthopaedic surgeons, and concluded that fully informed consent for treatment only occurred in 9% of the studied doctor-patient interactions.[19]. With surgical patients, often there were misunderstandings regarding such basic concerns as the risks and goals of proposed surgery.

SHARED DECISION MAKING IN ORTHOPAEDICS

Due to concerns regarding informed decision making and communication, significant work in orthopaedic surgery has been undertaken on shared decision making. Shared decision making incorporates the idea that patient preferences and values must be explicitly included in clinical decisions. Physicians bring clinical expertise to the discussion while patients bring their unique goals, risk tolerance, and personal situation to that same conversation. Shared decision making has been shown to be effective in clinical settings ranging from primary care to cancer treatment, bariatric, and orthopaedic surgery. Patients, after making shared decisions, feel empowered, suffer from reduced anxiety, and reach what they perceive as better decisions.[20] In orthopaedic surgery, evidence-based sources of health information presented in a patient accessible format are frequently used to encourage shared decision making. Such aids were used by orthopaedic surgeons working in Group Health, a large health system in Washington State, USA, and Idaho, USA, for all patients with a diagnosis of hip or knee arthritis. They report the use of these aids reduced the overall number of hip and knee replacements while secondary analyses of the data suggest that the decision aids encouraged good candidates for the procedures to proceed with the surgery.[21] Another study from San Francisco, USA, using both decision and communication aids specifically targeted patients who were candidates for joint replacement

Shared decision making has been shown to be effective in clinical settings

surgery. These authors demonstrated both greater surgeon satisfaction with patients' visits involving the aids and greater patient empowerment through the use of decision aids.[22] Use of these aids did not affect overall rates of surgery undertaken. An orthopaedic surgeon interested in using decision aids can easily find them on the internet; they do not need to invent their own. Sources for obtaining surgical decision aids, such as those used in these studies, include the Health Foundation in London, UK, and the Informed Medical Decisions Foundation in Boston, USA.

PATIENT FEEDBACK

No discussion of patient-centred care would be complete without discussing the importance of measuring patient satisfaction and treatment effects by gathering patient feedback. The difficulty faced by physicians when attempting to predict patient satisfaction or patient responsiveness to treatment is significant. Medicine is a service profession, and doctors understand the technical side of our treatments very well. However, patients are far better at assessing the service side of our craft, and, importantly, we must remember that patient perceptions, not physician beliefs, have been shown time and again to correlate with improved outcomes. Successful patient-centred practitioners, therefore, must regularly gather data from their patients. In the United States, payors are increasingly linking payment to patient-reported outcomes and satisfaction rates, while in Europe the NHS is already gathering patient-reported outcomes on a national scale for a range of procedures such as hip and knee replacement. Remuneration is linked to successful collation of data, and it is likely only a matter of time before poor outcomes will result in lower payments.

Surveys are the instrument most often used to gather patient information by hospitals, health systems and physicians. Numerous studies have found that patient surveys can accurately predict outcomes, such as hospital re-admission rates,[23] when the surveys focus on specific aspects of the patient experience, such as communication with doctors and nurses, rather than focusing on a patient's general feeling of well-being. Satisfaction rates, as measured by surveys, have even been demonstrated to correlate with inpatient mortality rates, suggesting that 'patient-centred information can have an important role in the evaluation and management of hospital performance.'[24] When using surveys, physicians should be careful to employ validated instruments. The Consumer Assessment of Healthcare Providers and Systems surveys are validated tools that are free to use. These are the most commonly used survey instrument available today and are the result of an initiative from the Agency for Healthcare Research and Quality, a branch of the US Department of Health and Human Services. There are several surveys available to meet different clinical needs.[25] While these surveys are in the public domain, users outside the United States should request permission to reproduce these materials. Physicians using these surveys will gain actionable knowledge of their patient interactions, such as the quality of their communication skills. While we may all feel that we communicate well, if our patients don't understand our explanations or instructions, then we have work to do. Surveys give us the feedback necessary to improve, even if that feedback can be humbling at times. Surveys allow us to understand the patient experience and give our patients the care that they need and want. Within the UK, patient experience surveys from a large cross section of patients have started to become a mandatory part of a physician's revalidation process.

Patients often ask themselves whether their doctors care about them or not. Researchers in Massachusetts, USA, addressing this profound question summarised their results as follows: 'The most important element of caring may not be the set of behaviours but a set of underlying abilities that include taking the patient's perspective and reflecting on the patient's responses.'[26] Patient feedback gives us the patient's perspective and allows us the opportunity for such reflection.

CONCLUSION

Patient-centred care advances medical practice in two distinct, but complementary, ways. First, a great deal of research has resulted in our understanding the ways the relationship between a patient and his/her provider can change treatment outcomes. As doctors, we have traditionally been taught that the surgery, the prescription, or the physical therapy is medical care. However, patients see their care much more holistically, and their views are the ones that affect results. Patients want more than proper prescribing. They want a personal relationship with an empathic physician who shares decision making with them and communicates well. This type of interaction results in improved patient outcomes and greater patient satisfaction with care. Second, we now recognise that we must systematically and regularly obtain feedback from patients themselves, in order to understand patient goals, effectiveness of treatment, and judge the success or failure of our work. Doctors have traditionally used physician-centred measurement tools or our personal judgments to measure outcomes. Now, more than ever, we are asking patients to judge the effectiveness of our treatments. After all, medical care is given for the benefit of our patients; they, therefore, are in the best position to judge its effectiveness. Patient-centred medicine can be practised by all types of doctors, and its use is spreading across the world. Orthopaedic surgeons are embracing it in greater and greater numbers as we strive to deliver better and more effective care in our individual communities.

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