

Role of decision aids in orthopaedic surgery

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Abstract

Medical treatment of patients inherently entails the risk of undesired complication or side effects. It is essential to inform the patient about the expected outcomes, but also the possible undesired outcomes. The patients preference and values regarding the potential outcomes should be involved in the decision making process. Even

though many orthopaedic surgeons are positive towards shared decision-making, it is minimally introduced in the orthopaedic daily practice and decision-making is still mostly physician based. Decision aids are designed to support the physician and patient in the shared-decision-making process. By using decision aids, patients can learn more about their condition and treatment options in advance to the decision-making. This will reduce decisional conflict and improve participation and satisfaction.

Key words: Shared decision-making; Decisional conflict; Empowerment; Orthopaedic surgery; Patient decision aid

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Core tip: In shared decision-making the caregiver provides expertise and evidence, and the patient and caregiver choose diagnostic and treatment options consistent with their values and preferences. To support patients in discussing their health decisions with their treating physician, patient decision aids have been developed. It is thought that empowering patients to participate in the decision making process with the help of decision aids results in increased satisfaction and physical function and reduced decisional conflict, anxiety, and resource utilization.

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SHARED DECISION MAKING

In shared decision-making (SDM) the caregiver provides expertise and evidence, and the patient and caregiver

choose diagnostic and treatment options consistent with their values and preferences. To support patients in discussing their health decisions with their treating physician, patient decision aids have been developed^[1]. It is thought that empowering patients to participate in the decision making process with the help of decision aids results in increased satisfaction and physical function and reduced decisional conflict, anxiety, and resource utilization^[2].

OUTLINE OF THE PROBLEM

Medical treatment of patients inherently entails the risk of undesired complication or side effects. It is essential to inform the patient about the expected outcomes, but also the possible undesired outcomes. The patients preference and values regarding the potential outcomes should be involved in the decision making process. Even though many orthopaedic surgeons are positive towards SDM, it is minimally introduced in the orthopaedic daily practice and decision-making is still mostly physician based^[3-5].

Many surgeons hold the opinion that the inequality between doctor and patient medical knowledge make SDM challenging. Other surgeons say that time constraints, patient characteristics and the clinical situation influence the ability to carry out SDM. Some surgeons claim they already apply SDM in their daily practice as they explain the treatment options and the potential advantages and disadvantages.

On the other hand, there is a high need from patients to be adequately informed and to understand their disease, the available treatment options and their possible outcomes and adverse effects. Poor SDM causes patients to feel insufficiently informed or overwhelmed with the information about their diagnosis and treatment options. As a result, patients experience a high level of decisional conflict, which influences the ability to make a well-considered decision that reflects their personal circumstances, values and preferences as well.

Decision-making can be challenging when evidence-based guidelines are inconclusive or when well-designed, randomized clinical trials show a small and probably non-clinically important difference between two treatments. As surgeons we have an obligation to consider resources, safety, simplicity, efficiency and patient self-management and to share our expertise with patients. Surely, if available evidence is inconclusive, the surgeon should take into account the patient's preferences, rather than to decide for the patient.

The Ottawa Decision Support Framework asserts that participants' decision needs will affect decision quality, which in turn affects behaviour, health outcomes, emotions, and appropriate use and costs of services. Unresolved needs adversely affecting decision quality include: Conflict in making a decision, inadequate knowledge, and unrealistic expectations^[6]. To facilitate SDM patients should be actively informed and should be a partner in the decision making process

instead of a subject for who is decided.

POSSIBLE SOLUTION

Elwyn *et al*^[7] proposed a model regarding how SDM can be practiced in the consulting room when a treatment decision is to be made. They defined three phases in the conversation: (1) choice talk; (2) option talk; and (3) decision talk. The choice talk is comprised of awareness that a choice is to be made. The option talk is to inform patients about treatment options and their pros and cons, often by integrating the use of decision support tools. During the decision talk patient and physician add value to the potential outcome and make a final decision.

Decision aids are designed to support patient is the decision making, their goal of is threefold: (1) It provides facts about the condition, options, outcomes, and probabilities; (2) should help clarify patients' evaluations of the outcomes that matter most to them; and (3) guide patients in the steps of deliberation and communication so that a choice can be made that matches their informed values. By using the decision aids, patients can learn more about their condition and treatment options in advance to the decision-making. They could bridge the (information) gap between doctor and patient^[8]. Optimal preparation before consultation will make patients better capable of conversing with their physician and make better use of their time at the outpatient clinic^[9]. This will reduce decisional conflict and improve participation and satisfaction^[10]. Similar results have been found in studies to other disciplines^[11,12]. Increased satisfaction will also have a positive effect on the relationship between patients and their care-providers. Having more realistic expectations is also likely to cause a decrease in the overuse of surgical treatments^[13].

Decision aids are especially designed for preference-sensitive treatment options. This involves making value trade-offs between benefits and harms that should depend on informed patient choice. When there is insufficient evidence about the outcomes, there cannot be a single "best" choice defined. The decision is therefore highly depending on the preferences of the patient, how the patient values the benefits and harms of a treatment.

Instead of simply offering generic advice, lectures, laboratory tests or prescriptions, patient are encouraged to participate in care with the help of a decision aid. The decision aid is designed to support, rather than replace, the counseling provided by health care practitioners. Also, the intent is not to burden the individual with the decision, but to help patients and providers work together to make decisions about treatment.

The designing process of a decision aids is carried out by experts about the specific diagnoses and treatment options. The content is based on the most recent evidence from national and international guidelines and publications and should be reviewed by patients on comprehensibility. The design of decision aids should

be conform the International Patient Decision Aid Standards, an international collaboration that developed quality criteria for content, development and evaluation. All information should be in accordance with current protocol, which makes the decision aid applicable in every orthopaedic practice. The content should be thorough, but succinct enough that patient can view it in the limited time they have at the outpatient clinic.

A decision aid can be offered by several media but our preference goes out to an online module, having the advantage that it can be adjusted easily to the most recent evidence and that it is available at all times.

PEARLS AND PITFALLS

Although results of the use of decision aids seem promising, research also states that several conditions may be necessary for successful implementation: (1) good quality decision aids to meet the needs of the population; (2) practitioners willing to use decision aid in their practice; (3) effective systems for delivering decision support; and (4) practitioners and healthcare consumers who are skilled in shared decision making^[14].

Some strides have been made in achieving these conditions, but the use of patient decision aids will not occur properly without adequate attention to these barriers to implementation^[15,16]. The right logistic implementation in the clinical practice is the key for a good use of the decision. It seems the most challenging in adopting the patient informed choice as standard care. Using decision aids should not be experienced as a burden, but as a time saving mechanism. Since it can provide information about treatment options, physicians can devote their consult purely to decision making and patients that have more realistic expectations result in less overuse of treatment options.

Decision aids can be very helpful in the decision-making process, but do not serve as a replacement of the conversation with the patient, it is a useful tool in improving SDM. Some patients may not want to be involved and leave the treatment decision solely up to their physician, arguing that he or she is the expert on the subject. We should respect the autonomy of the patient, even if this means that the decision is attributed to the caregiver. Furthermore, it is our task to make the decision aid applicable and available for all patients and accelerate adoption of SDM as the standard for practice, with resulting benefits to all patients, physicians, and the health care community.

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