

Shared Decision Making (SDM) in the Perioperative Setting

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Although numerous definitions exist in the literature for shared decision making (SDM), (1-3) they all contain the fundamental tenets that relate to the process of using the best available evidence to support patients in making healthcare decisions based on their own values, preferences, and beliefs. It revolves around the concept that the patient is really the only expert on what is right for them. Indeed, in this model, the clinician serves as an expert on the various diagnostic and therapeutic options that need to be presented. When done successfully, SDM represents the pinnacle of patient-centered care by providing patients, as Coulter and Collins stated in 2011, “the care they need and no less, and the care they want and no more”. (4)

Decision making has seen an evolution over the past approximately 150 years from one based on paternalism, through to one of a more informed basis in the 1980s, to the current SDM model being emphasized today. Up until the 1970s, the paternalistic approach was commonplace, and in fact codified in the medical ethics writings from the American Medical Association. Indeed their first Code of Medical Ethics in 1847 stated that “the obedience of patients to the prescriptions of his physician should be prompt and implicit. The patient should never permit his own crude opinions as to their fitness to influence his attention to them”.(5)

Of fundamental importance in SDM is that it pertains directly to how risk is communicated to the patient, and how the patient interprets this risk within their own (perioperative) life. We know from past studies, that 1 in 10 of us will eventually have surgery sometime in our life with an increasing chance as we age. (6) As a result, many of us will need to make decisions that balance having the proposed surgery with the various risks and benefits. However, the difficulty is that often the risks of surgery are uncertain. As a result, effectively communicating risk to patients is even more uncertain, particularly as the understanding of it can be quite variable.(7)

We know that “risk” from surgical procedures has several components. It involves direct surgical complications themselves (e.g., wrong vessel cut), but the vast majority of risks revolve around other procedural or perioperative issues (i.e., the sequelae of the procedures, such as the consequences of ischemic-reperfusion injury). That is, these risks are not directly related to the procedure itself, but complications that can manifest because of the complex interaction between the surgical procedure and the patient’s morbid conditions. This contrasts with anesthetic risks, which are exceedingly small (8) and are usually limited to those risks (including mortality) that occur within 24 hours of surgery. Fundamental to SDM considerations is not just these surgical, procedural, and anesthetic risks, but also the risks of potential long-term loss of independence. Importantly, these are not always considered by the surgeon or the anesthesiologist, in part because these complex interactions are not known by all and seemingly too distant in the future to be fully appreciated. Also important to this consideration is that not all physicians contain access to all of the necessary data.

SDM Steps

There are a number of steps to the SDM process that have been well-defined in the literature.(2) The first one begins with an introduction to the concept that a decision actually needs to be made. That is, the patient needs to be “informed”. Secondly, one needs to “explain” the various options that exist to the patient. Thirdly, one needs to “identify the patient’s individual values and goals”. Following the actual next step to “make a decision”, one should also “evaluate” the decision in accordance with the patient’s wishes and the factual information known by the practitioner.

As part of the SDM process, one needs to respect the patient’s decisional preference.(9) However, understanding the patient’s desire as to what level to be involved with is often a challenge. There are a number of different types of decisional making processes, including active, collaborative, and passive. In the active form, the patient wants to be presented with the facts and make all the decisions themselves, somewhat in isolation of the physician’s input. However, the vast majority (>50%) likely want this process to be a collaborative decision. There are certain patients, particularly in older age groups, who are more likely to take an even more passive approach and are far more comfortable with this almost anachronistic paternalistic approach.

Communication is fundamental aspect to SDM. However, one of the difficulties with SDM is that physicians generally think they are better communicators than they actually are. Indeed, some of the pitfalls of communication in SDM revolve around insufficient time given for establishing the correct relationships and communicating the risks and benefits, the often common poor diagnostic and prognostic accuracy that is available to physicians, as well as the lack of confidence in one's own skill in patient communication techniques that physicians generally are not trained in. Statistical illiteracy and difficulty with numeracy are often shared by patients and physicians. In addition, many patients have a poor overall educational levels.

Thankfully there are a number of solutions to address these communication pitfalls, such as tools and guides to optimize the SDM process. Indeed, visual aid guides, pictographs and figures are often very useful with communication. Furthermore, it is important to use absolute risk over relative risk in order to avoid non-transparent framing risk. For example, if a 1 in 7,000 risk is changed to 2 in 7,000 risk, although is a 100% relative increase in the risk, is a relatively minimal change in the overall odds of having the adverse effect. Telling the patient that you are doubling the risk likely misrepresents the perceived severity of the risk increase to the patient.

As mentioned previously, another road block to the SDM process is that decision support materials may not be in the language of the patient, or at their level of education. It is estimated that most patients operate at only the 8th grade level (for English), whereas most materials are at a more advanced stage than this. In addition, many patients have difficulty understanding risk:benefit statistics and numbers – i.e., a deficiency in numeracy. Accordingly, it is much easier for patients to understand graphical formats versus numeric or verbal formats. In addition, difficulty with understanding qualitative statements is also problematic. For example, suggesting verbally that the patient is at “high risk” does not really give the patient an understanding of whether this is high relative to their understanding or relative to the physician's understanding of risk.

When considering why SDM should be incorporated into our patient-centered approach, it can often simply be seen as an ethical imperative. However, it has also been shown to reduce variability in treatment options (preferences), reduce decisional conflict and patient anxiety, increase patient knowledge and preparation, as well as decisional satisfaction and quality.(3) It is also import to understand that as SDM is still in its relative infancy compared to other the other decisional models, the needed research to address issues of cost, efficiency and patient outcomes is similarly early in its development.

Future SDM Research

Whether SDM actually is effective is a fruitful area for future research.(10) The benchmarks for success need to be carefully defined. Although there is some evidence that patient confidence and satisfaction increases, and that there is less decisional conflict, whether this leads to a reduction overall of patient anxiety is an important point to consider.

In summary, SDM is a fundamental tenet of patient-centered care. Ensuring that risk is communicated to patients, and interpreted within the nuances of the patient's own values and goals for the proposed procedure, and that a decision is made in which both parties share in the process, is the most desired outcome.

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