CPC Corner

Sharing Clinical Decisions by Discussing Evidence with Patients

By David Price, MD, FAAFP

Introduction

Our patients receive skillfully presented medical information from multiple sources other than us—in particular, from direct-to-consumer pharmaceutical advertising that pervades television, radio, print media, and the Internet. At the same time, clinicians cannot easily keep pace with the volume of new medical information available from studies—and the quality of studies may vary greatly. We clinicians must therefore differentiate high-quality from less-than-high-quality evidence and become skilled in communicating this difference to patients to help address their concerns.

Consider the following scenario: A 55-year-old thin, nonsmoking female calls you with questions about her hormone therapy. Two months ago, she started a regimen of estrogen 0.625 mg and progesterone 2.5 mg daily to treat perimenopausal hot flushes. She has no history of hypertension but has impaired glucose tolerance with a fasting blood glucose level of 114 mg/dL. Her total cholesterol level is 185 mg/dL; low-density lipoprotein (LDL) cholesterol level, 120 mg/dL; high-density lipoprotein (HDL) level, 45 mg/dL; and triglyceride level, 100 mg/dL. Her mother has coronary artery disease, which manifested at age 60 years. The patient has had excellent relief of her hot flushes. She recently read an article (in a lay publication) that warned all women to stop hormone therapy, but she is concerned that symptoms might recur if she does this. What should you tell her?

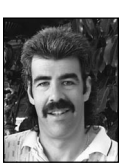
Shared decision making is an excellent approach for discussing treatment options with patients like the one described here. Shared decision making is a communication strategy that provides evidence to patients in a nonbiased way and that shares with patients the basis as well as the responsibility for making medical decisions. Moreover, this approach inherently recognizes and respects patient's values; helps patients to consider the seriousness of the condition to be prevented or treated; helps patients to understand risks, benefits, and alternative options for diagnosis and treatment; engages patients in the decision-making process at a level which they personally find comfortable and desirable; and includes patients' own beliefs and values as factors in the decision-making process.[1] In this sense, shared decision making differs from the process of obtaining informed consent; in that process, risks and benefits are disclosed without explicitly incorporating the patient's values or sharing the basis for decision making in a formal decision-making process. Shared decision making should not be used to intentionally steer patients to a particular decision.

According to one study, 19% to 68% of patients—especially younger, more highly educated patients—are interested in sharing the decision-making process with their physicians.[2] Shared decision making is consistent with the Institute of Medicine's call for a patient-provider partnership "to ensure that decisions respect patients' wants, needs, and preferences and that patients have the education and support they require to make decisions and [to] participate in their own care."[3:p7] Further, shared decision making may promote trust within patient-physician relationships, enhance patients' confidence about participating in their own health care, and reduce patients' decisional conflict with a chosen course of care.

In general, strategies for shared decision making are applicable in four situations:

- When recommendations conflict with one another or insufficient evidence exists to form a basis for recommending for or against an intervention
- When several possible interventions are believed to have approximately equal effectiveness
- When the benefits of an intervention may vary from patient to patient
- When, on the basis of their values or personal situation, patients may differ in the way they weigh the risks and benefits of an intervention.

In general, shared decision mak-



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ing should not be used when an intervention is clearly harmful or when the best choice regarding how to proceed is clearly evident on the basis of quality and cost-effectiveness. In addition, a patient might not want to share in the decision-making process; but the clinician can know this only by asking the patient directly. Declining to share the decision making does not absolve the clinician of responsibility for explaining treatment options to patients.

Clinical practice contains many potential barriers to sharing medical decisions. For example, many patients have difficulty understanding health risks, medical terminology, and statistical probabilities. For many patients, sharing decisions regarding medical care is a new role that might create uncomfortable uncertainty or regret (eg, if the course of care does not result in an ideal outcome). Other patients may firmly believe in what they want and thus remain uninterested in sharing decisions with their clinician.

Barriers for clinicians may include lack of either training or experience using shared decision making or fear that this activity will make further demands on the limited time available for patient care. We therefore must be judicious about beginning our use of shared decision making; practical approaches might include starting with either one condition or with one patient per day. Use of concise, key phrases also may help us to incorporate shared decision making into our practice while we learn from experience and from each other. Use of high-quality patient education tools in printed or other form (eg, multimedia, compact disk, videotape, Internet)—online examples are available on the www.kp.org and Kaiser Permanente Clinical Library Web sites—also can be helpful for supplementing brief conversations with patients and to facilitate the shared decision-making process.

When sharing evidence with patients, clinicians should remember that relative risks are more positively persuasive than absolute risks.[4,5] However, many patients find absolute risks more understandable.[5] The framing of evidence may also influence patient decisions. For example, the concept of "a 20% chance of survival" may be more persuasive than "an 80% chance of death." In addition, use of defined numbers or comparisons to known, stable, understandable outcomes is preferable to using unclear relative terms such as "rare" or "frequent," because patients might not interpret these terms the same way clinicians do—and clinicians may even differ among themselves in how they interpret these terms! (David Eddy, MD, PhD, personal communication).[a] Another tip is that proportions (eg, "4 out of 5") may be easier for patients to understand than a percentage (eg, "80%"). For many patients, visual tools (eg, simple bar graphs or stick figure diagrams) may be helpful, although patients might automatically—and erroneously—assume that they are included in the not-at-risk group.[6] Finally, we should remember that our body language and tone of voice also can subtly influence patient decisions.

Shared decision making is an excellent approach for discussing treatment options with patients …

Several methods exist for incorporating shared decision making into clinical encounters. General rules include giving information about each option, answering ques-

Example of Exploring Use of Shared Decision-Making Process

Patient (a 50-year-old male): "I'm here for a PSA test."

Clinician: "Could you tell me more about what you are concerned about?"

P: "My uncle died of prostate cancer, and I'm worried that it might affect me, too."

C: "I can see why you're concerned. What have you heard about the PSA test?"

P: "I saw an ad that urged all men to have one."

C: "Thank you. This helps me understand where you are coming from. We certainly have that test available, and I'd be happy to order it for you if that's what you'd like. Can I tell you what we know about the test and prostate cancer? Then you can decide what we should do."

Scenario 1: Patient Agrees to Share Decision-Making Process

P: "Sure, that's a good idea."

(Clinician then provides evidence and asks about the patient's preference.)

Scenario 2: Patient Uncertain About Sharing Decision-Making Process

P: "You're the doctor, what do you recommend?"

C: "Since you and I are different people with different circumstances, I'm not sure that what I would recommend would really meet your needs. Would it be okay if I explain to you a couple of things about PSA? Then, if you'd still like me to make a recommendation, I'll do the best I can. I'll also try to explain how my recommendation is based on my understanding of your circumstances. Is that okay with you?"

(Discussion continues until patient understands basis of recommendation and uses it to reach decision.)

Scenario 3: Patient Refuses to Share Decision-Making Process

P: "No, thanks. I just want the test."

(Without further discussion of options, clinician then orders PSA test.)

Table 1. Outcomes from the Women's Health Initiative Estrogen-Plus-Progestin arm[7]

	Breast cancer	Coronary heart disease event	Stroke	Hip fracture[a]	Colon cancer[a]
Hazard Ratio (Relative Risk) Compared with Placebo	1.26 (1.00–1.59)[a]	1.29 (1.02-1.63)	1.41 (1.07-1.85)	0.66 (0.45-0.98)	0.63 (0.43-0.92)
Absolute Risk Reduction	--	--	--	0.06%	0.05%
Absolute Risk Increase	0.08%	0.07%	0.08%	--	--
Number Needed to Treat	--	--	--	1666	2000
Number Needed to Harm	1250	1429	1250	--	--

-- = not applicable.
Outcomes presented in table were observed after a mean of 5.2 years of follow-up.
Numbers in parentheses are 95% confidence intervals; confidence intervals that include 1.0 are not statistically significant
[a] Secondary outcome.

tions, trying different methods, individualizing communication for each patient, and sharing our successes (and pitfalls!) with each other.

After we present options, many patients ask us to make a recommendation for them. This request is often expressed as, "I don't know, you're the doctor!" Because the patient in this situation is given the option first, the decision is still considered a shared one—on the basis of his or her level of comfort, the patient has decided to allow us to make a recommendation. Epstein et al suggest[6] that if we make a recommendation based partly on our own preferences, we should frame the recommendation from our understanding of the patient's situation and potential preferences, include our rationale (from the evidence), and disclose any biases we might have. Checking with the patient after making a recommendation can help us to assess the patient's comfort with the proposed plan.

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The patient in our case example is somewhat younger than the mean age (63 years) of women in the Women's Health Initiative (WHI) study of postmenopausal hormone therapy.[7] WHI was a double-blind, placebo-controlled, randomized trial which included women receiving estrogen 0.625 mg and progestin 2.5 mg daily for a mean duration of 5.2 years;[7] a second arm of the study included women who had hysterectomy and subsequently received unopposed estrogen 0.625 mg for a mean duration of 6.8 years.[8] Some concern might exist about the applicability of the WHI results to the patient in this scenario, because older women are estrogen-deficient for longer periods of time than are younger women. However, the WHI did include women in their 50s; with some explanation, a reasonable choice would be to use the WHI results as a basis for shared decision making with this patient.

Table 1 summarizes results of the WHI estrogen and progestin study and illustrates the pitfalls of relying on relative risk when presenting data to patients. The 34% relative risk reduction in hip fracture and 37% relative risk reduction in colon cancer may be more positively persuasive than the 26% relative risk increase in breast cancer, the 29% relative risk increase in heart disease, and the 41% relative risk increase in stroke. However, relative risk does not account for the baseline probability or risk of disease and tends to magnify both benefit and risk. Using the number needed to treat or the number needed to harm, we can see that, compared with women receiving placebo, fewer women treated with estrogen and progesterone over a 5.2-year period will have prevented a hip fracture (1 in 1666) or colon cancer (1 in 2000) than will have a diagnosis of breast cancer (1 in 1250), stroke (1 in 1250), or a heart-disease-related event (1 in 1429). Although not presented here, another arm of the WHI study, the Women's Health Initiative Memory Study,[9] showed that in a subset of older women taking combined hormone therapy, the risk of dementia was higher than in women receiving placebo: The number needed to harm was 435 after four years.

This scenario also illustrates why shared decision making is a useful strategy in situations where different patients may differ, on the basis of their values or personal situation, in how they weigh the risks and benefits of an intervention. For any individual patient, the risks of any of these events (beneficial or adverse) are small in absolute terms. Many patients may feel that the symptomatic relief achieved from hormone therapy is worth the small individual risk, whereas other patients might elect to discontinue hormone therapy (or to try another treatment option) on the basis of their family history, the relative value they place on avoiding an event (eg, breast cancer), or on the experience of friends.

Shared decision making represents an opportunity for clinicians to incorporate the science of evi-

dence-based medicine with the "art" of clinician-patient communication skills. The mnemonic "IAIS" (Figure 1) may help clinicians to incorporate evidence-based medicine and shared decision-making approaches efficiently into clinical care of patients. As Ned Calonge, MD, MPH, Chair of the United States Preventive Services Task Force and Chief Medical Officer for the State of Colorado has stated (personal communication), the role of shared decision making is to "invest in information and accept the patient's decision." ❖

[a] Kaiser Permanente of California, Pasadena, CA.

EBM + SDM = IAIS

Invite patient perspective/concerns
Acknowledge patient perspective/concerns

Instruct (about the evidence)
Summarize a jointly developed plan

Figure 1. Evidence-based medicine (EBM) can be combined with the shared decision-making (SDM) process in a four-part activity represented by the mnemonic "IAIS" (Invite/Acknowledge/Instruct/Summarize).

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To Soar

One can never consent to creep when one feels an impulse to soar.

— Helen Keller, 1880-1968, American author and lecturer