

A Shared Decision-making Intervention

Success or Failure?

Michael J. Barry, M.D.

IN this issue, Warner *et al.*¹ describe the results of a well-designed randomized trial of a shared decision-making (SDM) approach, supported by a decision support tool, to engage smokers regarding whether or not to abstain from smoking for upcoming elective surgery and ideally permanently. According to the study's primary hypotheses, the intervention was successful. Measures of decisional conflict, risk communication, and patient involvement in decision making showed statistically significant improvements compared with usual care. However, these effects on the primary outcomes were not accompanied by improved knowledge, different decisions regarding perioperative smoking behavior, or reported smoking abstinence. Although the study was not powered on the smoking abstinence outcome, the 95% CI around the point estimate suggests it is unlikely that the true perioperative quit rate was any greater than approximately 15% with the intervention compared with the control group. Was the intervention really successful based on all the data in the article? Perioperative smoking cessation, from the medical perspective, is a desirable end with improved health outcomes and no appreciable risk of medical complications. Therefore, an increase in smoking abstinence might well have been considered the study's most important outcome, and from that perspective, the intervention was not successful. Why not?

Shared decision making between clinicians and patients is a means to an end of better quality decisions, not an end in itself. Better decisions are decisions that are more informed, are made with patients more engaged, and more consistent with patient preferences. SDM is appropriate when a patient and a clinician are faced by a decision with more than one medically reasonable path forward. Was the decision about perioperative smoking abstinence appropriate for SDM? Probably not, as there is one clearly superior way to proceed from the medical perspective, perioperative, and ideally permanent smoking abstinence. But who gets to say what choices are appropriate? Clearly, some study participants can and did choose not to stop smoking before surgery. I applaud the researchers for at least trying an SDM



“Shared decision making between clinicians and patients is a means to an end of better quality decisions, not an end in itself.”

pros and cons of each option. Patients were not better informed on the study's knowledge test as a result of exposure to the decision support tool, an unusual finding in decision aid research. Whether a more informative decision aid following the International Patient Decision Aids Standards, the principle quality guidelines for patient decision aids,² would have improved knowledge and changed decisions and behavior in this situation would need to be addressed by another study.

Finally, was the SDM intervention implemented in the most effective way? The cards were given to the patient to read just before the preoperative visit with the doctor, with the patient then handing a single card with their choice to the doctor during the subsequent visit. The OPTION scale data derived from review of audiotapes suggests that this approach improved discussion during the visit, an important finding that should encourage more exploration of the relation between previsit decision support and decision quality. However, the preoperative visits generally occurred just 1 or 2 days before surgery when the patients were no doubt being bombarded by many preoperative considerations and concerns. Sending out a decision support tool farther in advance for patients to study with their friends and family if they desired may have allowed more time for the intervention to get

intervention to tackle this problem, but it proved a challenge to improve on the 60% of participants reporting abstinence the morning of surgery in the usual care group. The usual care counseling strategy, considerably more directive than the SDM approach, appeared reasonably effective at promoting at least short-term abstinence in this clinical situation. A motivational interviewing approach, as opposed to SDM, might have been even more successful.

Although the primary reason SDM was not associated with higher abstinence rates was likely that the approach was not a good fit for the problem, one can also ask whether the decision support tool used effectively supported the intervention. The tool included three cards each describing one of the three options (keep smoking, quit for now, and quit for good) with some qualitative bullets about the

Image: ©Thinkstock.

Corresponding article on page 18.

Accepted for publication April 9, 2015. From the Informed Medical Decisions Foundation, Boston, Massachusetts.

Copyright © 2015, the American Society of Anesthesiologists, Inc. Wolters Kluwer Health, Inc. All Rights Reserved. *Anesthesiology* 2015; 123:5-6

adequate attention and lead to the complicated behavior change being asked of patients for the abstinence strategies. Finally, quit smoking resources were eliminated from the decision support tools in the development process. In this circumstance, raising the advisability of smoking abstinence earlier, and backed by behavioral support interventions, may have been more effective.

In short, to be effective, SDM supported by decision aids needs to address appropriate problems, using good tools, delivered in an optimal way. This study, with its combination of positive and negative findings, adds important knowledge that should help achieve those goals.

Competing Interests

Dr. Barry is an employee and chief science officer of Healthwise, Inc., Boise, Idaho, a 501(c)3 nonprofit organization

that develops and licenses educational and decision support materials. He is also a professor of medicine, part time, at Harvard Medical School, Boston, Massachusetts.

Correspondence

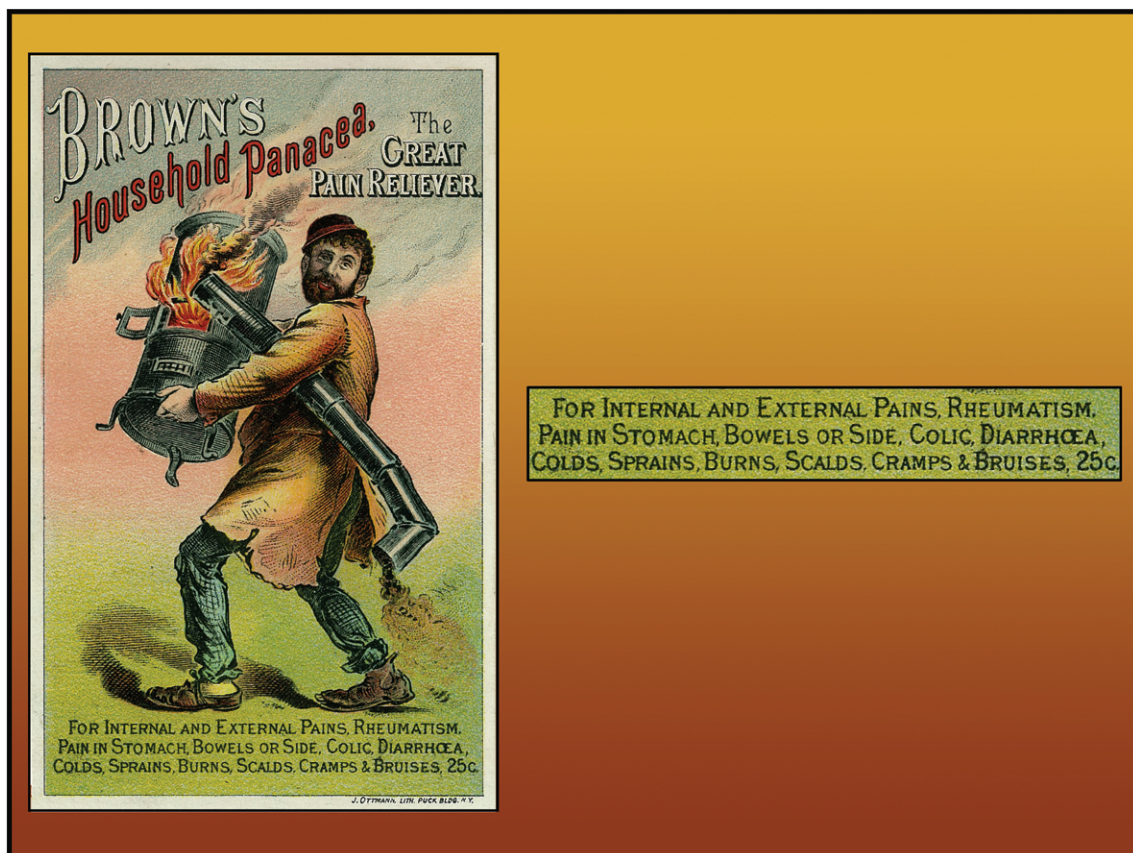
Address correspondence to Dr. Barry: mbarry@imdfoundation.org

References

1. Warner DO, LeBlanc A, Kadimpati S, Vickers KS, Shi Y, Montori VM: Decision aid for cigarette smokers scheduled for elective surgery. *ANESTHESIOLOGY* 2015; 123:18–28
2. Volk RJ, Llewellyn-Thomas H, Stacey D, Elwyn G: Ten years of the International Patient Decision Aid Standards Collaboration: Evolution of the core dimensions for assessing the quality of patient decision aids. *BMC Med Inform Decis Mak* 2013; 13(suppl 2):S1

ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

Brown's Household Panacea: Stealing Away Pain



Symbolizing pain as a burning stove, this “Brown’s Household Panacea” advertising card featured artwork produced by New York’s J. [Jacob] Ottman Lithographing Company. “Sold by all druggists” as a nostrum from the 1870s through the 1920s, “Brown’s Household Panacea and Family Liniment” could be applied externally, at full strength, as a “sure cure for toothache,” cuts, burns, bruises, pains, sprains, stiff joints, and rheumatism. Diluted to a teaspoon of Panacea per cup of water, this cure-all was advertised to be taken internally to relieve sleeplessness, sore throat, stomach pains, colic, or chills. A stronger dose, “a full bottle [of Panacea] in a pint of water,” was touted for relief of chills or colic ... suffered by the family horse! (Copyright © the American Society of Anesthesiologists, Inc.)

George S. Bause, M.D., M.P.H., Honorary Curator, ASA’s Wood Library-Museum of Anesthesiology, Schaumburg, Illinois, and Clinical Associate Professor, Case Western Reserve University, Cleveland, Ohio. UJYC@aol.com.