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Using patients to promote evidence-based prescribing:

(invited commentary on Schwartz LM and Woloshin S, "Communicating uncertainties about prescription drugs to the public: a national randomized trial")

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Billions of dollars are spent each year on drugs with unproven clinical effectiveness and limited safety records. Sales of ezetimibe totaled over $4 billion per year in 2010 despite little evidence of benefit on meaningful clinical outcomes as a substitute or adjunct to statin therapy.[1] Millions of people were early adopters of rofecoxib (Vioxx) and rosiglitazone (Avandia), only to see these drugs withdrawn or restricted due to safety concerns. What can be done to increase rational prescribing?

In this issue of the Archives, Schwartz and Woloshin report on a patient-oriented approach to promote use of drugs with proven clinical benefit and a well-established track record of safety.[2] In a survey of 2,944 adults, they presented 2 highly-simplified case scenarios. The first case involved the choice between 2 hypothetical lipid-lowering drugs. Both drugs have identical safety profiles, but drug A has a proven clinical benefit – reducing heart attacks – while drug B has only been shown to lower cholesterol. Participants were randomized into three groups: (1) receiving only the above information, (2) receiving the information plus a brief warning highlighting that it is not known whether drug B improves clinical outcomes, or (3) the information, warning, and a directive statement to "ask for a drug shown to reduce heart attacks."

When asked which drug they would prefer, 59% of participants in the information-only group chose the drug with evidence of clinical benefit. In contrast, 71% of participants in each of the 2 warning groups chose this drug. The authors obtained similar results from a second scenario that focused on favoring drugs with a long established track record of safety. As with the first scenario, the 2 warning groups were more likely to choose the better (in this case, older) drug, with 34% of participants in the information-only group selecting the older drug vs. 53% in each of the warning groups.

What can this warning-based approach teach us about improving prescribing? It depends on whether one sees the study results as a glass half-empty or half-full. On the positive side, a simple warning improved patient decision-making. On the other hand, seemingly irrational decisions persisted to a striking degree. One in three participants preferred a drug with no evidence of clinical benefit despite explicit instructions to ask for a drug known to confer benefit (and no discernible reason to favor the inferior drug). In the second scenario, half of participants chose a newer heartburn drug despite explicit directions to ask for a drug for a longer track record of safety. It's not only patients who make such illogical decisions. Physicians are equally well-established in our proclivity to favor new, relatively untested medications and to prescribe contrary to guidelines.[3]

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These contrasting perspectives highlight the challenges and opportunities to use Schwartz and Woloshin's findings to improve care. Simply adding warnings to patient educational materials is unlikely to meaningfully increase rational prescribing. Other influences on prescribing are strong, physicians are often unaware of the evidence basis for drugs they prescribe, and educational interventions alone typically have minimal impact on behaviors.[4-6]

Nonetheless, giving patients warnings and instructions may be of substantial value if we also provide them the tools to help them successfully advocate for their own care. Such patient activation programs can dovetail with other system-based approaches that align the incentives of patients and physicians toward evidence-based care. For example, a recent study used letters, financial incentives, and phone calls to encourage patients with hypertension to discuss thiazide diuretics with their physician.[7] The approach was highly successful in increasing the number of patients taking thiazides, and was welcomed by patients and physicians alike because both felt that it served their interests. Similarly, other work has shown that outcomes in older adults transitioning from hospital to home can be substantially improved by coaching patients about how to talk with their doctors and advocate for themselves.[8] Many physicians have first-hand experience with situations where highly engaged patients (or their caregivers) identified an error, potential treatment, or other opportunity to improve care that would otherwise have been missed.

We work within a health care environment whose complexity and incentives makes it difficult to consistently provide the care to which we aspire. We are thus well-served by being open to approaches that build the patient-physician partnership to improve quality of care. These efforts need to be paired with systems improvements that promote high-quality prescribing, help physicians respond to patient questions, and align the incentives of patients, physicians, and health care systems. Patient activation programs are a valuable tool to provide better care. We should take full advantage.

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