clinical symptoms persisted throughout the washout phase and even beyond. Prolonged functional effects of PDE5 inhibitors, which exceed their plasma half-life, have also been found by others.9 The fact that a single-dose of a PDE5 inhibitor is insufficient to increase digital blood flow or attenuate cold-induced vasoconstriction in patients with RP indicates that the beneficial effect may involve mechanisms other than pure inhibition of cold-induced vasoconstriction.9 In conclusion, vardenafil appears safe and effective in improving clinical symptoms and digital blood flow in patients with RP. Surprisingly, clinical efficacy is prolonged after discontinuation of the drug.

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Published Online: June 18, 2012. doi:10.1001/archinternmed.2012.2271
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Financial Disclosure: None reported.


Financing/Support: This study was funded by Bayer Healthcare, Leverkusen, Germany, who provided the study medication and also in part by the German Federal Ministry of Research and Education (BMBF grant 01KN0706). We kindly acknowledge support by ZKS Köln (grant BMBF 01KN1106).

Role of the Sponsors: The sponsor had no role in the design and conduct of the study, in the collection, analysis, and interpretation of the data, or in the preparation, review, or approval of the manuscript.

Additional Contributions: Michael Hunzelmans, MD, contributed significantly to the study concept and design; Erland Erdmann, MD, Thomas Krieg, MD, and Nicolas Hunzelmans, MD, critically revised the manuscript for important intellectual content and provided administrative support.


Communicating With Physicians About Medical Decisions: A Reluctance to Disagree

Effective patient-physician communication is essential for shared decision making, considered by some to be the “pinnacle” of patient-centered care.1 Many health care decisions have multiple options and no correct choice. These are called preference-sensitive decisions, and the optimal decision is one that takes into account patient preferences and values in a collaborative process with the physician.

See also page 1132

known as shared decision making. We sought to describe patients’ intentions to engage in shared decision-making communication behaviors in response to a hypothetical preference-sensitive clinical scenario and to examine the effects of underlying patient beliefs on these behaviors.

Methods. An online panel of 1340 patients older than 40 years who had visited a physician within the last year read a hypothetical scenario about treatment of heart disease and were surveyed about 3 behaviors key to reaching a shared decision: (1) asking questions, (2) discussing preferences, and (3) voicing disagreement, when relevant. The survey was theoretically grounded and drew on the psychosocial constructs of the Integrative Model of Behavioral Prediction,2,3 which posits that 3 respondent characteristics influence, for purposes of our study, a patient’s intention to engage in a health-related communication behavior: (1) patient attitudes, (2) patient-perceived social
norms, and (3) patient self-efficacy. Patient attitudes reflect the patient’s expectation, or lack thereof, that a communication behavior will result in a positive outcome. Patient-perceived social norms indicate whether the patient considers a communication behavior to be socially acceptable to peers and important others. Finally, patient self-efficacy reflects the patient’s belief that he or she has the skills and capacity to carry out the communication behavior if desired. Questions were formulated from extensive qualitative focus group data and tested and refined through iterative cognitive interviews.

Behavioral intentions and attitudes were measured with 2 items each. Perceived social norms and self-efficacy were measured with 3 items each. Each survey question response was measured on a 7-point Likert scale and weighted equally. All subscales had acceptable reliabilities (Cronbach $\alpha = .75$). Average scores of 5 or more on each subscale were categorized as positive, and scores below 5 were categorized as negative.

For the dichotomous variables, we used the related-samples Cochran Q test to assess within-group differences. We used logistic regression to test whether any of the covariates predicted intention to engage in shared decision-making communication behaviors.

Results. Participants were mostly white, most between 40 and 60 years old, with roughly an even mix of men and women. Survey respondents were highly educated, 42.6% having completed college or graduate study. Many were retired, and only 46.9% were currently employed. Nearly all were currently insured (89.6%), with most having been seen by a physician within the last 6 months (80.3%). Thirty-eight percent had a chronic ailment, and 16% of the sample reported a history of heart disease. A minority held either an autonomous or passive decision-making role preference: 11.1% felt that they should be mostly responsible for treatment decision making, while 19.3% felt that the physician should be mostly responsible. Almost 70% preferred a shared decision-making role, with patients and physicians contributing equally to treatment decision making.

Nearly all patients could envision asking questions (93.1%) and discussing preferences (94.0%); few, however, would voice disagreement with their physician if their preferences conflicted with physician recommendations (14.0%) ($P < .001$) (Figure). While most felt that they had the ability to disagree (79.0% reported self-efficacy for disagreeing), few thought that disagreement with their physician was socially acceptable (14.0%) or would lead to good outcomes (15.2%) ($P < .001$).

In logistic regression analyses, demographic characteristics—including age, race, education, income, Charlson comorbidity index, and heart disease—did not predict a reluctance to disagree. Despite considerable statistical power, only global preference for decision-making roles significantly correlated with a participant’s intention to disagree. Participants who preferred to make their own medical decisions (an autonomous decision-making role) were twice as likely to intend to express their disagreement with preference-incongruent recommendations from their physician. Several beliefs, however, were found to underpin the reluctance to disagree.

agree. Among participants who would not disagree with their physician, 47.2% feared being seen as a difficult patient; 40.0% thought that disagreement would damage their relationship with their physician; and 51.5% worried that it might interfere with getting the care that they wanted.

Comment. A reluctance, indeed a fear, to disagree appears to be a significant barrier to shared decision making that is present across all sociodemographic strata. To our knowledge, a patient-held fear to voice disagreement has not been found or examined in previous research, and yet it is a major challenge to making progress toward shared decision making. Reluctance to express disagreement in the office may correlate with poor adherence outside the office. Limitations of this study include the use of a large convenience sample and a hypothetical scenario. The findings point to the need to test interventions that explicitly allow patients to voice disagreement with their physicians. This may well require attitude changes as well as behavior change.

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Published Online: July 9, 2012. doi:10.1001/archinternmed.2012.2360

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Proper disposal of controlled substance medications, a legally gray area since the Controlled Substance Act of 1970 was passed, has received renewed attention in recent years because of an increase in deaths related to opioid pain reliever (OPR) overdoses and increased nonmedical use of OPRs.\(^1,2\) Prescription drug take-back events have been organized under the purview of the Drug Enforcement Administration (DEA) to properly dispose of controlled substance medications; to decrease prescription medication diversion, abuse, and accidental poisonings; and to decrease environmental hazards resulting from improper medication disposal. The DEA has reported pounds of medications in aggregate donated at take-back events but has not examined the extent to which OPRs are being donated at these events.\(^3\) We analyzed the characteristics of donors and medications donated at 11 take-back events in rural Appalachia, an area struggling with disproportionately high rates of OPR nonmedical use and abuse.\(^4\)

Methods. Researchers interviewed all medication donors at each take-back event held in Northeast Tennessee/ Southwestern Virginia from 2009 to 2011. Donor data included sex; age; race; zip code; means by which donor learned of take-back event; motivation(s) for donating medications; past disposal methods; quantity of medication containers for controlled substances, prescription medications, and over-the-counter medications and supplements; and number of patients represented in medications donated. Individual controlled substance unit doses were quantified at 6 of the 11 take-back events. Institutional review board approval was granted by the parent institution.

Results. Seven hundred fifty-two individuals (57% female, 96% white, and 90% aged ≥ 40 years) representing 53 zip codes in Appalachia donated 16,956 containers (eg, vials, bottles) of medications intended for use by 1,210 patients. No donors refused to participate in the study. When given the opportunity to indicate 1 or more reasons for donating medicines at take-back events, donors indicated a desire to clean out their medicine cabinets (68%), environmental concerns associated with disposing of medicines with other waste (45%), and accidental poisoning concerns (14%) as motivating factors. A total of 1,128 containers of controlled substances were donated, which represented 9.3% of all prescription medications. The Figure shows the composition of doses of controlled substances obtained from 402 donors at 6 take-back events. A total of 1,146 controlled substance dose units were donated. Hydrocodone combinations, oxycodone and oxycodone combinations, and methadone, 3 commonly prescribed OPRs, accounted for 32%, 11%, and 5% of total donated controlled substance doses, respectively. The mean (SD) number of dose units per donor for hydrocodone-, oxycodone-, and

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**Prescription Drug Abuse and DEA-Sanctioned Drug Take-Back Events: Characteristics and Outcomes in Rural Appalachia**

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**Figure.** Percentage of total controlled substance dose units (N=11,406) obtained at drug take-back events by medication or therapeutic class.

*Antispasmodics, butalbital compounds, dromabinol, fentanyl, isomeptene mucate, dichloralphenazone and acetaminophen (Midrin), phentermine, pregabalin, and testosterone.