

Physician-Patient Communication About New Medications

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Abstract

- **Objective:** To describe common pitfalls that may lead to misunderstandings when physicians prescribe new medications, and to address how new medication discussions might ensure patient understanding.
- **Methods:** Presentation of dialogues from audiotaped outpatient physician-patient encounters and discussion of potential communication strategies.
- **Results:** Physicians and patients discussed information such as what medication was prescribed, medication purpose and directions for use, and side effects. Patients may not readily ask questions to clarify confusing information. Tips for ensuring clear and comprehensible communication about new medications are suggested.
- **Conclusion:** Physician-patient communication concerning new medications may be ambiguous. Comprehensive information can be provided in a clear and succinct manner to increase patient understanding and adherence to medication regimens.

Television, magazine, and e-mail advertisements promote medications. Half of all Americans take at least 1 prescription medication [1], and discussions with friends and family members about medications are widespread. Over the bridge game, in the golf cart, at church, and at the dinner table, the conversation among older people invariably turns to "all the medicines I need to take." It seems that the final words concluding every radio and television advertisement are "Ask your doctor."

Given the ubiquity of discussions about medications, it seems ironic that physicians and patients barely communicate when starting a new medication. Both patient report [2-4] and observations of office visits [5-10] show that discussions about new medications prescribed during outpatient visits are often suboptimal. Yet, better physician-patient communication and information giving are associated with improved patient adherence to medication regimens [11-16], which in turn can prevent unnecessary hospitalizations and emergency room visits [17-20] and lead to improved patient health outcomes. Agency for Healthcare

Research and Quality and other guidelines recommend that patients receiving new prescriptions should understand basic information about the medication, such as what the medication is called, what it is for, how to take it, what side effects to look for and what to do if they occur, how long to take the medicine, and any food or activities to avoid while taking the medication [21-23]. These recommendations parallel suggestions for other informed consent conversations. If relevant to the patient, discussions about medication cost may provide patients with tools for cost-saving [24,25] and help mitigate nonadherence [26].

In this paper, we use examples drawn from audiotaped physician-patient encounters to describe some common pitfalls that may lead to misunderstandings when new medications are prescribed and address how discussions might be improved to enhance the effectiveness of pharmacologic therapy. The interactions are drawn from outpatient visits to family physicians, internists, and cardiologists in clinics in California [27].

What Am I Taking?

A 76-year-old man presents to his cardiologist's office complaining about a weak urinary stream, urinary frequency, urgency, intermittency, and nocturia. After discussing the patient's symptoms and adjusting 1 of the patient's other medications, the physician introduces the need for a new medication:

Dr: I'm also going to give you a new medicine.

Pt: In the place, or more?

Dr: In addition to.

Pt: Uh-huh.

When patients are already taking medications, they may be confused about whether a new medication is an addition to their current regimen or a replacement for one of their medications. With older patients, it might be helpful to write down recommended changes or denote changes on the

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medication bottles. The physician continues the discourse by stating:

Dr: Let's see if we can't help you pass your urine better.
Pt: Uh-huh. Well it does seem like, you know, you go in to go the first thing in the morning and sometimes it's no more than a dribble...

By commenting about the patient's urinary difficulty, the physician tried to convey why he was prescribing the new medication. Although a specific diagnosis was never brought up during the conversation, the patient acknowledged understanding of the medication's purpose by responding to the physician's comment with further description of his urinary complaints.

The medication name was never mentioned during the patient's office visit. Patients who do not know the name of a newly prescribed medication are at a disadvantage if they do not receive a legible paper prescription to take to the pharmacy. If there is a problem when the physician sends the prescription to the pharmacy electronically or via telephone or fax, the patient will not be able to tell the pharmacist what medication he or she was supposed to receive. This could lead to delays while the pharmacy calls the physician's office for clarification. Furthermore, knowing the name of the new medication enhances the patient's participation in decision making concerning this new therapy. The patient may have received the medication before or may be predisposed to take or refuse the medication based on the experiences of trusted others. It is better for the physician to know the patient's views when the medication is first prescribed so that erroneous notions can be dispelled or an alternative medication can be selected.

In this case, the patient received a written prescription, and after looking at it, the patient asked:

Pt: I see you got 60 pills on there. Is that going to last for 4 months in Yuma?
Dr: When are you leaving?
Pt: Oh, it will be some time after the 20th.
Dr: Well, wait and see how you do on the medicine and if you need a larger amount...
Pt: Just come and see you?
Dr: Yeah.
Pt: Or call.

(intervening conversation)

Dr: Yep, and I'll make an appointment for you to come back and see me in 4 months.
Pt: 4 months?
Dr: 4 months.
Pt: OK.
Dr: But you can always come back sooner if you have problems.

When getting a new prescription, if patients ask questions they are most often about medication supply or quantity [28]. This patient proactively asked about whether he would have enough pills for his trip. It is unlikely that the 60 pills prescribed would last for 4 months. The physician's comment about needing a larger amount could be confusing. From a clinical perspective, it seems apparent the physician is anticipating that the patient will take a trial of the medication, and if it is effective, the patient can come in or call for refills of a larger quantity. Yet, the physician's statement could also be interpreted to mean that the patient may not need refills because the medication did not need to be taken regularly, or perhaps the medication would have had its full effect after 60 pills and need not be continued. If refills do not correspond with follow-up schedules, medication dosing and continuity can be confusing for patients. To avoid confusion, the physician could have arranged for a follow-up visit or telephone call prior to the patient's trip or the prescription could have been written for 30 tablets with refills permissible for 120, enough to last the 4 months the patient was concerned about. It is important to note that although the patient remained confused, he gave no verbal indication of this and asked no questions, even after the physician later asked him twice if he had any questions.

Even when patients are told the name of a medication, they may have a difficult time grasping it. The following 75-year-old man with diabetes went to his internist's office complaining about some symptoms he experienced after starting a new diabetes medication a few months earlier. The doctor responded by suggesting switching to a new medication:

Dr: I think we could stop the Tolinase and just see what happens. However--
Pt: That was for blood sugar and it really helped the blood sugar.
Dr: Well, we have other medicines for blood sugar that are very effective.
Pt: Sure.
Dr: So why don't we just stop the Tolinase, switch you to an alternative medicine for the sugar and see if it helps.

When the physician proposed stopping the patient's current diabetic medication, the patient expressed some reluctance by stating that the medication worked really well to control his blood sugar. The physician picked up on this, and allayed the patient's fears by reassuring him about the efficacy of the new medication. She also gave clear instructions about stopping the current medication and replacing it with a new one, and emphasized that the purpose of the new medication was to help the patient's blood sugar. She subsequently repeated the instructions for stopping the old medication:

Dr: OK, let's have you stop the Tolinase.
Pt: Can we go to something else?

Dr: Yeah, Glucophage.

Pt: I wish they'd use English. You guys have a secret code.

Dr: Yeah, actually this one we like, this is a newer medicine, it's a very good one.

Pt: Good. That's great. See if it clears it up.

The repetition was helpful, since the patient did not seem to grasp the information the first 2 times his physician mentioned starting a new medication. Although the physician clearly stated the medication name during the exchange, the patient didn't catch it, and claimed that doctors have a "secret code." The patient's comment—overlooked by the physician—could have led to clarification about the medication name by repeating it or writing it down. It is also important which medication name is used by the physician. Brand names are often easier to pronounce, making them enticing to use so patients can understand them. However, there are a number of reasons to use generic medication names, even for medications that are available only in branded form. The patient will hear generic medication names in a variety of settings (eg, hospital, rehabilitation facility) and thus patients are less likely to be confused about whether they are receiving their usual medication if they are used to this medication name. Furthermore, this may be the name on the medication bottle if generic substitution is performed. Additionally, the generic name often confers information about medication type and can lead to better understanding when changes are made within class or a medication becomes available in generic form. If within a medical group all the clinicians use generic names for medications, there may be less confusion when patients see physicians other than their regular practitioner.

It is worth noting that both of the patients quoted above, although confused, did not ask any more questions about the newly prescribed medication. The former patient appeared to give up trying to reconcile follow-up with when refills would be needed. The latter patient seemed satisfied with the physician's repeated assurance that the new medication would work well for him. After some intervening conversation, the physician revisits the topic of the new medication:

Dr: We need to get you set up for a blood sugar test after you're on this medicine awhile to make sure its doing the job.

Pt: OK, to see if it's doing any good.

Dr: Yeah.

Pt: When I take my readings every morning and afternoon that will tell me something.

Dr: You'll get a good idea.

In this case, perhaps due to the patient's anxiety about controlling his blood sugar, the physician details a plan to see whether the medication is working, and as she is wrapping up the visit, reiterates general instructions about the medication regimen:

Dr: So you're going to stop your Tolinase, switch over to this medicine.

Pt: OK.

Dr: This one is very nice medicine.

Pt: No such thing.

Dr: OK.

Pt: Have a good day.

Dr: Bye-bye.

This physician relied on repeating her instructions with the aim of ensuring patient understanding. Unfortunately, the need for repetition may be a signal that the conversation is not going well. Much better would be to listen to the patient's comments and try for a real dialogue such as the following theoretical conversation:

Dr: I heard you say that there was "no such thing as a nice medicine." Tell me about that.

Pt: Well it's just that I'm really worried about having side effects and you haven't told me yet what I should look out for.

Dr: So you'd like a more thorough understanding of potential side effects.

Pt: Yeah.

Dr: OK. I'm thinking of starting you on metformin. Have you heard of that medicine?

Pt: I think so. My cousin was taking it and she said it was bad for your kidneys.

Dr: Anything else?

Pt: Not that I know of.

Dr: Well, good. With diabetes, we always have to watch out for your kidneys. So I'm glad you're aware of that. Metformin in large doses can be hazardous, but I don't plan on that sort of dose. And we will check blood tests every few months to make sure everything is OK. I think you'll be fine. And I think your blood sugars might be a whole lot better controlled and *that* will protect your kidneys.

Pt: OK, Doc. Let's try it.

The model we recommend has been called "an educational sandwich," and consists of 3 steps: Ask, Tell, Ask. The physician can ask what the patient knows, what the patient is concerned about, and what the patient has heard from other sources. Then, usually a brief explanation can be followed by again asking, "Any other thoughts?" "Any other questions?" "Now that we've talked a bit about it, what are your concerns [29]?"

Even if the patient voices no concerns just now, we can expect them to surface when his pharmacist hands him the "worry sheet" along with the filled prescription and cautions him about potential side effects of this "very nice medicine."

What's It For and How Do I Take It?

Although patients starting new medications ask more questions of their physicians than those not receiving new prescriptions [28], the examples above illustrate that patients may not always attempt to clarify potentially confusing statements. Even when they query physicians about treatment plans, they may not be persistent enough to receive full clarification. A 31-year-old man went to his family physician's office with complaints of cough-producing sputum, rhinorrhea, and chest tightness that was worsened by second-hand cigarette smoke. After a discussion about the effects of cigarette smoke on the bronchial passages, the physician comments:

Dr: Could be asthma. And that is nothing more than allergies. Allergies affecting your lungs and bronchial tubes.

Pt: Oh, that is in the family too. I forgot to tell you.

(intervening conversation and physical examination)

Dr: Also, I am going to give you an inhaler.

Pt: An inhaler?

Dr: Yeah, for the asthma.

Pt: So, this is asthma then?

Dr: Uh-uh.

Pt: Oh great.

Dr: Reactive airway disease. Asthma is a dirty word to me.

Pt: I know.

Dr: OK.

The physician initially stated that the patient might have asthma, but later retracted his statement when recommending the inhaler to the patient. They agree that "asthma is a dirty word," but there was no discussion about what reactive airway disease is or why an inhaler would be helpful. The patient's family members might tell him that the prescribed inhaler is for asthmatics, and he might not use it if he doesn't have a good understanding about why it would help him. One study demonstrated that 12% of older patients did not fill a prescription because they did not think they needed the drug they were prescribed [30]. A clear explanation about why a medication is prescribed or about what the medication is supposed to do might increase the chances of the patient using it.

In this office visit, there was no further discussion about the inhaler. Thus, it is unclear whether it was supposed to be used regularly, or as needed, for chest tightness. Potential side effects also were not mentioned. Instead, the conversation progressed to the second new medication prescribed:

Dr: Let me give you a, a short course of some antibiotics for the yellow stuff cause I think you've got an infection sittin' on top of all this. Give you the 6-pill variety. Short and sweet.

Pt: OK. So you only have to take 6 pills?

Dr: Yup, only once a day. Five days, you're done. (Ensuing unrelated conversation).

Although the patient attempted to clarify the number of pills prescribed, he did not ask any further questions. If 6 pills are being prescribed over 5 days, what happens with the extra pill? The antibiotic prescribed is likely azithromycin. Patients take 2 pills at the same time on the first day, and then 1 pill on each of the following 4 days. However, these directions were not clearly stated, and there was no more medication-related conversation during the visit. Hopefully the pharmacist clarified the antibiotic directions for this patient.

The patient was never told the actual name of the antibiotic during the visit. Not mentioning specific antibiotic names when prescribing antibiotics may contribute to patient misunderstandings about the purpose of antibiotics. Patients not understanding that different antibiotics are used to fight different types of bacterial infections may be more likely to take any available (likely left over) antibiotic when developing an infection. Furthermore, patients may be able to prevent an adverse reaction or save a pharmacy phone call to their physician's office if they recognize that the antibiotic being prescribed is one to which they are allergic.

Are There Side Effects?

A 45-year-old woman with a history of hypertension and severe diffuse pain in her hips and knees presented to her internist's office because of worsening pain that prevented her from working.

Dr: All I could recommend, you know, today, at this point, is we could try some other uh, pain medications.

You've been on, you've taken like a Vicodin an' those.

Pt: No, just what, the 'flammatory. I try not to take, uh, I start taking it last weekend, but it's getting worse.

Dr: Taking what?

Pt: The reflex... the uh, inflammatory.

Dr: Uh-huh. OK.

Pt: Why would I be in this pain?

Dr: I don't know. I have no idea why you know, you're having these, such diffuse pains. Like I said, did you want, you want to try something like a Vicodin?

Pt: Uh...

Dr: You know, it's stronger, more like a narcotic, uh, pain reliever. You've taken those before right?

Pt: No.

Dr: Oh no. You never took Vicodin?

Pt: Maybe it's me, but I try not to take 'em.

Dr: You try not to, or you never did?

Pt: I never did.

Dr: Oh, you never did. Oh, OK. So you have some at home?

Pt: No.

Dr: Oh. I gave you a prescription but you never filled it?

Pt: No.

Dr: You want to try it now?

Pt: Yes.

Dr: Oh, OK. Do you need any other medications at this time?

This patient expressed a general reluctance toward taking medications. She had taken something that she believes was an anti-inflammatory medication but stated that she tried not to take it, and only started because her joint pains were getting worse. At this point, we really don't know exactly what she took or how much. The patient did not get a chance to respond to the physician's first query about whether she wants to try Vicodin before the conversation drifted on to a different topic. It turns out that the physician had prescribed the medication before, but the patient never filled the prescription at the pharmacy.

Even though the patient agrees to accept the Vicodin prescription, there was no significant discussion about her previous failure to fill the medication, so we don't know if it was due to fear of side effects, preference for alternative therapies, or difficulty with medication affordability. Since these obstacles may still exist but were never addressed, the patient may not fill the opiate prescription this time either. In fact, when the topic of the medication is revisited later in the visit, the patient seems more concerned about getting a note for work than about the medication:

Dr: OK...let's uh, let's try the Vicodin, hopeful—you know, I don't, you probably shouldn't need it for very long, you know, a couple of days maybe.

Pt: I need a statement for my work.

Dr: OK.

A more in-depth discussion might have begun with the physician revealing her confusion. For instance, the physician might have said: "OK, I am beginning to realize that I'm a little confused. Let's take this one step at a time. First tell me again what anti-inflammatory medicine you were taking." Additional efforts at reaching a precise understanding would include questions about the Vicodin prescription that was unfilled, about the patient's ideas of needs for time off from work, and the patient's other as-yet unstated expectations and hopes.

The conversation might reveal that the patient was OK with continuing the anti-inflammatory medication and that she merely wanted a note for work. (Indeed, it sounded like the patient had not received an adequate trial of the anti-inflammatory agent, but the physician appears not to notice this and advances to a new medication class.) In this case, the entire conversation about Vicodin might have been circumvented. If the patient ended up filling the opiate prescription, the litany of side effects detailed in the package insert may have caused sufficient anxiety to keep her from

taking the medication. Furthermore, she may be more likely to stop the medication upon experiencing side effects.

Since the patient is not given instructions about the amount of medication to take in 1 day, she could take too much or not enough to control her pain. The physician alludes to the fact that the patient may only have to take the medication for a few days, but since it was not explicitly stated, she may not realize that she is only supposed to take the medication only if she has the pain, not all the time. By discussing the efficacy of the medication in relieving the patients' pain, the potential side effects, and her reluctance to take the medication, the physician may have been able to allay some of the patient's fears, facilitate her acceptance of taking the medication, and better ensure that her pain would be adequately controlled.

Discussion

Good physician-patient communication about new medications is important to ensure patient understanding about what a medication is called, why it is needed, how it should be taken and for how long, and what potential medication side effects might occur. A good place to start is by asking what the patient already knows or fears. Since patients do not readily ask questions about their medication regimens, even when they do not understand the conversation, every effort should be made to convey this information in an unambiguous manner. Some sort of check-back system is needed to learn exactly what the patient heard and thought he understood from the doctor. After explaining about the prescription, the clinician can say: "I don't always explain this as clearly as I would like, so tell me what you heard and then I can clarify anything I've left out." That way the clinician takes on herself the responsibility for having been incomplete or unclear and doesn't blame the patient for her lack of understanding. The actual conversations portrayed here might seem cumbersome and easily improved. Although self-reflection is particularly difficult, physicians might try to analyze their own statements when prescribing a new medication. Are the words used efficiently? Are they likely to convey all the patient needs to know?

Depending on the medication prescribed, other issues may be important to discuss when prescribing new medications. Reassurance about medication efficacy, arrangements for follow-up visits to assess whether a medication is working, and coordination for laboratory or other tests critical to monitoring the medication may be needed. Patients also like to know there are no interactions with existing medications and want to hear about medication supply and refills [28,31]. Issues concerning medication cost and insurance plan may be important to discuss, especially for older patients taking multiple medications. Assessing a patient's potential for medication adherence and giving tips for adherence might be helpful for some patients.

Physicians prescribing new medications might pay attention to the following communication strategies:

- Ask the patient for their understanding, then provide information clearly and succinctly.
- Repeat important information.
- Check for understanding by asking patients to repeat critical elements [32].
- Write the medication's purpose on the prescription so it will appear on the bottle label.
- Ask patients how they plan to incorporate the prescribed medication into their daily routine.
- Write down instructions.
- Listen for and address patient concerns.

Despite time constraints during office visits, essential information can be efficiently provided when new medications are prescribed [5,33]. It may be insufficient for physicians to expect pharmacists to educate patients, because errors might occur between physician and pharmacist, pharmacists often provide minimal verbal counseling [34–36], and patients may refuse pharmacist counseling about new medications. Providing patients with basic information about their medications in a clear, succinct manner may be instrumental in increasing patient ability to understand and adhere to their medication regimens.

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References

1. National Center for Health Statistics. Health, United States, 2005 with chartbook on trends in the health of Americans. Hyattsville (MD): U.S. Dept. of Health and Human Services; 2005.
2. Morris LA, Tabak ER, Gondek K. Counseling patients about prescribed medication: 12-year trends. *Med Care* 1997; 35:996–1007.
3. Morris LA. A survey of patients' receipt of prescription drug information. *Med Care* 1982;20:596–605.
4. Stewart JE, Martin JL. Correlates of patients' perceived and real knowledge of prescription directions. *Contemp Pharm Pract* 1979;2:144–8.
5. Tarn DM, Heritage J, Paterniti DA, et al. Physician communication when prescribing new medications. *Arch Intern Med* 2006;166:1855–62.
6. Richard C, Lussier MT. Nature and frequency of exchanges on medications during primary care encounters. *Patient Educ Couns* 2006;64:207–16.
7. Stevenson FA, Barry CA, Britten N, et al. Doctor-patient communication about drugs: the evidence for shared decision making. *Soc Sci Med* 2000;50:829–40.
8. Makoul G, Arntson P, Schofield T. Health promotion in primary care: physician-patient communication and decision making about prescription medications. *Soc Sci Med* 1995;41:1241–54.
9. Cockburn J, Reid AL, Sanson-Fisher RW. The process and content of general-practice consultations that involve prescription of antibiotic agents. *Med J Aust* 1987;147:321–4.
10. Scherwitz L, Hennrikus D, Yusim S, et al. Physician communication to patients regarding medications. *Patient Educ Couns* 1985;7:121–36.
11. Svarstad BL. The doctor-patient encounter: an observational study of communication and outcome [dissertation]. Madison: University of Wisconsin; 1974.
12. Hall JA, Roter DL, Katz NR. Meta-analysis of correlates of provider behavior in medical encounters. *Med Care* 1988; 26:657–75.
13. Schneider J, Kaplan SH, Greenfield S, et al. Better physician-patient relationships are associated with higher reported adherence to antiretroviral therapy in patients with HIV infection. *J Gen Intern Med* 2004;19:1096–103.
14. Bull SA, Hu XH, Hunkeler EM, et al. Discontinuation of use and switching of antidepressants: influence of patient-physician communication. *JAMA* 2002;288:1403–9.
15. Falvo D, Woehlke P, Deichmann J. Relationship of physician behavior to patient compliance. *Patient Couns Health Educ* 1980;2:185–8.
16. Hulka BS, Cassel JC, Kupper LL, Burdette JA. Communication, compliance, and concordance between physicians and patients with prescribed medications. *Am J Public Health* 1976;66:847–53.
17. Sokol MC, McGuigan KA, Verbrugge RR, Epstein RS. Impact of medication adherence on hospitalization risk and healthcare cost. *Med Care* 2005;43:521–30.
18. McDonnell PJ, Jacobs MR. Hospital admissions resulting from preventable adverse drug reactions. *Ann Pharmacother* 2002;36:1331–6.
19. Chan M, Nicklason F, Vial JH. Adverse drug events as a cause of hospital admission in the elderly. *Intern Med J* 2001;31:199–205.
20. Col N, Fanale JE, Kronholm P. The role of medication non-compliance and adverse drug reactions in hospitalizations of the elderly. *Arch Intern Med* 1990;150:841–5.
21. Agency for Healthcare Research and Quality. Questions are the answer: getting a prescription. Available at www.ahrq.gov/questionsaretheanswer/level3col_1.asp?nav=3colNav05&content=05_0_prescription. Accessed 5 April 2007.

22. Agency for Healthcare Research and Quality. Quick tips—when getting a prescription. AHRQ Publication No. 01-0040c. Available at www.ahrq.gov/consumer/quicktips/tipprescrip.htm. Accessed 5 April 2007.
23. Agency for Healthcare Research and Quality. 20 Tips to help prevent medical errors. AHRQ Publication No. 00-PO38. Available at www.ahrq.gov/consumer/20tips.htm. Accessed 5 April 2007.
24. Tarn DM, Paterniti DA, Heritage J, et al. Physician communication about the cost and acquisition of newly prescribed medications. *Am J Manag Care* 2006;12:657–64.
25. Shrank WH, Hoang T, Ettner SL, et al. The implications of choice: prescribing generic or preferred pharmaceuticals improves medication adherence for chronic conditions. *Arch Intern Med* 2006;166:332–7.
26. Wilson IB, Rogers WH, Chang H, Safran DG. Cost-related skipping of medications and other treatments among Medicare beneficiaries between 1998 and 2000. Results of a national study. *J Gen Intern Med* 2005;20:715–20.
27. Kravitz RL, Bell RA, Azari R, et al. Request fulfillment in office practice: antecedents and relationship to outcomes. *Med Care* 2002;40:38–51.
28. Sleath B, Roter D, Chewning B, Svarstad B. Asking questions about medication: analysis of physician-patient interactions and physician perceptions. *Med Care* 1999;37:1169–73.
29. Keller V, Carroll J. A new model for physician-patient communication. *Patient Educ Couns* 1994;23:131–40.
30. Safran DG, Neuman P, Schoen, C, et al. Prescription drug coverage and seniors: findings from a 2003 national survey. *Health Aff (Millwood)* 2005;Suppl Web Exclusives:W5–152–W5–166.
31. Bislew HD, Sorensen TD. Use of focus groups as a tool to enhance a pharmaceutical care practice. *J Am Pharm Assoc* 2003;43:424–34.
32. Bertakis KD. The communication of information from physician to patient: a method for increasing patient retention and satisfaction. *J Fam Pract* 1977;5:217–22.
33. Tarn DM. What do doctors communicate when prescribing new medications [dissertation]? Los Angeles: University of California; 2006.
34. Svarstad BL, Bultman DC, Mount JK. Patient counseling provided in community pharmacies: effects of state regulation, pharmacist age, and busyness. *J Am Pharm Assoc* 2004;44:22–9.
35. Schommer JC, Wiederholt JB. The association of prescription status, patient age, patient gender, and patient question asking behavior with the content of pharmacist-patient communication. *Pharm Res* 1997;14:145–51.
36. Wiederholt JB, Clarridge BR, Svarstad BL. Verbal consultation regarding prescription drugs: findings from a statewide study. *Med Care* 1992;30:159–73.

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