Factors Affecting Physicians' Responses to Patients' Requests for Antidepressants: Focus Group Study

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BACKGROUND: The ways in which patients' requests for antidepressants affect physicians' prescribing behavior are poorly understood.

OBJECTIVE: To describe physicians' affective and cognitive responses to standardized patients' (SPs) requests for antidepressants, as well as the attitudinal and contextual factors influencing prescribing behavior.

DESIGN: Focus group interviews and brief demographic questionnaires.

PARTICIPANTS: Twenty-two primary care physicians in 6 focus groups; all had participated in a prior RCT of the influence of patients' requests on physicians' prescribing.

MEASUREMENTS: Iterative review of interview transcripts, involving qualitative coding and thematic analysis.

RESULTS: Physicians participating in the focus groups were frequently unaware of and denied the degree to which their thinking was biased by patient requests, but were able to recognize such biases after facilitated reflection. Common affective responses included annoyance and empathy. Common cognitive reactions resulted in further diagnostic inquiry or in acquiescing to the patient's demands to save time or build the patient-clinician relationship. Patients' requests for medication prompted the participants to err on the side of overtreating versus careful review of clinical indications. Lack of time and participants' attitudes—toward the role of the patient and the pharmaceutical ads—also influenced their responses, prompting them to interpret patient requests as diagnostic clues or opportunities for efficiency.

CONCLUSIONS: This study provides a taxonomy of affective and cognitive responses to patients' requests for medications and the underlying attitudes and contextual factors influencing them. Improved capacity for moment-to-moment self-awareness during clinical

reasoning processes may increase the appropriateness of prescribing.

KEY WORDS: patient requests; antidepressants; antidepressive agents; doctor-patient communication; patient-physician relationship; depression; advertising; focus groups; primary care physicians.

J Gen Intern Med 23(1):51–7

DOI: 10.1007/s11606-007-0441-8

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INTRODUCTION

Patient requests have a profound impact on prescribing, especially when prompted by direct-to-consumer advertising (DTCA). Whereas DTCA may improve health outcomes by educating patients, improving physician-patient communication, and promoting access to care,^{1–4} opponents of DTCA suggest that presenting unbalanced information, questionable indications, and overly emotional appeals may prompt patients to seek inappropriate or unnecessary treatment.^{5–12} In a recent study, our group found that patients' requests for antidepressants improved quality of care (including prescribing) for depression. However, patient requests also increased prescribing for adjustment disorder with depressed mood, for which antidepressants are of questionable value. Questionable prescribing was more likely when the requests were purportedly prompted by DTCA compared with requests that were purportedly prompted by an informative television show.¹³ Others have also found that medication requests dramatically increase prescribing regardless of clinical indications.¹⁴ These results suggest that physicians are not wholly objective "learned intermediaries" who can dispassionately filter information.¹⁵

The mechanisms through which patient requests affect prescribing behaviors are poorly understood. Data from previous research has provided information about the content, process, and outcomes of office visits. However, prior research has not provided insight into the affective, cognitive, attitudinal, and contextual factors that influenced the physicians' diagnostic impressions, decisions to prescribe, and motivation to inquire further about the patient's symptoms.

Reactions to requests may grow in importance as patients increasingly bring physicians information of variable quality. Our aims in this study were to describe physicians' affective and cognitive responses to standardized patients' (SPs)

Received October 25, 2006

Revised May 7, 2007

Accepted October 24, 2007

Published online November 7, 2007

Table 1. Standardized Patient Presentations and Request Types

	Brand-name request driven by direct-to-consumer advertisement: "I saw this ad on TV the other night. It was about Paxil®. Some things about the ad really struck me. I was wondering if you thought Paxil® might help me."	General request driven by informational TV show: "I was watching this TV program about depression the other night. It really got me thinking. I was wondering if you thought a medicine might help me."	Symptoms only, no request
Major depression role	A	B	C
Adjustment disorder role	D	E	F

Adapted from the SIP study.¹³

requests for antidepressants, including the attitudinal and contextual factors influencing prescribing behavior.

METHODS

Focus group interviews were used to investigate physicians' internal thought processes and external factors influencing their responses to patients' requests for antidepressants. We drew our sample of 22 physicians from the 152 who had participated in the Social Influences on Practice (SIP) Study.¹³

SIP Study Design

We briefly describe the SIP study to provide context. This was a randomized controlled trial that analyzed physicians' prescribing behavior in response to requests for antidepressants made by unannounced SPs. Clinical presentations were of a middle-aged woman with fatigue and a musculoskeletal complaint, and either a major depression of moderate severity (usually treated with medication) or an adjustment disorder with depressed mood (for which medication use is questionable). The SP presented 1 of 3 request types: a DTCA-driven request, a request driven by an informative television show, or no request (Table 1).

The participants were 152 primary care physicians (internal and family medicine) recruited in Sacramento, CA; San Francisco, CA; and Rochester, NY. SPs made covert, unannounced visits with each physician seeing 1 SP presenting each clinical condition. Each of the 2 visits was associated with a different request type. Greater detail about the methods and SP roles are reported elsewhere.¹³

Focus Group Recruitment

All 51 Rochester physicians and 51 Sacramento physicians who participated in the SIP study were invited to participate in

the focus groups. The San Francisco site was unable to participate for logistical reasons. The study was approved by institutional review boards at participating institutions. The 22 physicians who agreed to participate were interviewed during 1 of 6 focus groups, held on different days, based on the physicians' schedules with a range of 3–5 participants per group. Recruitment rate was 22% of all physician participants from the SIP study. Recruitment was conducted by e-mail and fax. Two subsequent attempts were made to contact nonrespondents. Participating physicians were given a \$100 honorarium and a light dinner. Four focus groups were conducted in Rochester; two were conducted in Sacramento. The demographics of the participants in the focus groups were similar to those of the larger study (Table 2). Table 2 summarizes their prescribing choices and compares them to the overall percentages of prescribing in the SIP study.

Focus Group Process

The first 4 focus groups were held face to face in Rochester. Two subsequent groups were held by teleconference in Sacramento. Consent was obtained in writing before all groups. Trained moderators began each session by summarizing the SIP study results and explaining the purpose of the focus groups. During in-person interviews, moderators played 2 verbatim video reenactments of actual SIP visits that exemplified request types and physician responses; during the teleconference interviews, examples of request types were given.

The focus group sessions included a guided discussion of SP roles and request types, and participants were prompted throughout the discussion to provide detail about how their responses may have been shaped by their thought processes, emotions, and the visit context (see Table 3 for the guiding questions). Each participant was prompted to recall their actual SP encounters, if possible, or to describe their responses to similar situations or the video reenactments.

Table 2. Summary of Prescribing Choices by the Physicians in the Focus Group

Prescriptions	Paxil	Other AD	Other drug	Nothing	Totals	Percent of AD prescribers in focus group study (n=22)	Percent of AD prescribers in SIP study (n=152)
Depression/DTC request	3	1	1	2	7	57	53
Depression/general request	0	5	1	1	7	71	76
Depression/no request	0	3	1	4	8	38	31
Adj. disorder/DTC request	4	2	2	1	9	67	55
Adj. disorder/general request	0	4	2	0	6	67	39
Adj. disorder/no request	0	1	3	3	7	14	10
Totals	7	16	10	11	44	52	44

Other AD: an antidepressant other than Paxil. Other drug: a drug other than an antidepressant (e.g., NSAID, muscle relaxant, etc).

Table 3. SIP Study Focus Group Questions

Focus Group Questions
1. Were you surprised by study results? Why or why not?
2. Did medication requests alter your diagnostic impression? Why or why not? If so, how?
3. Describe what went on in your mind immediately after request.
4. How did requests alter your clinical reasoning process?
5. Do you think that it was appropriate to prescribe medication for adjustment disorder role once prompted by a request?
6. Why do you think physicians responded the way they did?
7. Is there a difference between requests prompted by an internet search, those prompted by informative TV programs, and those prompted by DTCA? If so, please describe the difference.
8. Contrast the actions you would typically exhibit in this situation with those that you would consider correct when evaluating another physician's actions (e.g., auditing a chart or supervising a trainee).*
9. How might your practice change, if at all, after reading this study?
10. What actions do you think should be taken on a national level, if any, in response to the SIP study?

The question marked with an asterisk was added after the first 3 focus groups.

Moderators took detailed notes, carefully monitored participant responses, made sure that everyone had a chance to speak, used frequent prompts to elicit specific examples and greater detail, and requested clarification when necessary.

Focus groups lasted between 51–81 minutes with a mean time of 69 minutes. They were audiorecorded, transcribed, and analyzed using an iterative review approach involving the Atlas.ti qualitative coding software (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany).

Data Analysis

We used a “grounded theory” approach to qualitative data analysis.^{16,17} The first 3 focus groups were analyzed using open coding, and an additional question was added to the guiding questions (Table 3, question 9) for further prompting of cognitive processes during the next 3 focus group discussions. Analysis took place through an iterative process of review (i.e., by inductively assessing the recurring categories and themes) and development of a set of codes that reflected the cognitive, affective, attitudinal, and contextual processes affecting the physicians’ decisions to prescribe.

Two members of the team (AT and JS) individually reviewed the transcripts and convened to note the recurrent themes within and across interviews.¹⁸ The 2 coders then met with a third researcher (RE) to audit the coding system and discuss emerging themes. Examples of each code were noted, and any differences in coding were resolved by discussion and consensus, eliminating redundancies, and consolidating infrequent codes into broader themes. This process continued until no new codes emerged, otherwise known as “data saturation”.¹⁹ Codes and findings were audited for consistency and face validity by a fourth investigator (DAP). Finally, representative quotations were selected to capture the essential elements of emergent themes.

To present the results, codes were put into broader groups and frequency counts were made. Only explicit statements expressing participants’ opinions are presented as evidence in the “Results” section. When a participant acknowledged another’s opinion without further elaboration (e.g., “Yes that’s true...”), the acknowledgement was not included in the analysis.

RESULTS

Annoyance and Empathy in Response to Patient Requests

The most common affective responses to patients’ requests were annoyance and empathy. Many participants directed frustration and annoyance at DTCA marketing tactics, the goals of which are to “push the drug, not to make a better diagnosis” (MD7) “[nor to] educate the patient” (MD1). Many also expressed annoyance with their own and other physicians’ susceptibility to these tactics, and frustration with time lost discussing the pros and cons of the DTCA-suggested drugs with patients. For some, frustration also originated from the shift from a less adversarial, but paternalistic belief that “patients were naïve, doctors had the knowledge, [patients] came in, they asked for your opinion, and you [as the physician] gave it” (MD7), to a paradigm in which patients request (or even demand) a treatment that they may or may not need. One participant stated:

It almost encroaches on our professionalism as to ...what ...our roles are ...as physicians and theirs as patients—even though we might believe in a more participatory medicine, when it comes down to it, ...we’re kind of losing control of decision making (MD2).

In contrast, about a quarter of the participants responded empathetically, feeling that the request was a manifestation of patients’ suffering from a potentially stigmatizing illness.

Closure, Engagement, and Other Cognitive–Behavioral Responses to Patient Requests

Faced with the ambiguity of having to respond to patient requests for medication, a majority of the focus group participants favored prescribing antidepressants, some expressing that it is better to “err on overtreating” (MD5) and some citing the relative lack of serious side effects of the medication. One commented, that “in this particular condition, it’s better that the adjustment disorder patients get overtreated than the depressed patients get missed” (MD4). Another’s approach was that “if they’re not better, you can always stop it” (MD8). Family history of depression and patient-reported effectiveness of a particular antidepressant for a family member also encouraged them to report that they would prescribe.

Similarly, a majority of the participants favored complying with a patient’s request to build a better physician–patient rapport in a potentially stigmatizing situation, as long as it conformed to “what we think is good medical care” (MD9). One physician summarized the issue as follows:

In an initial meeting, the patient [is] trying to establish ...some rapport. ...the medication is almost secondary to the doctor–patient relationship that you’re establishing... [Although] obviously, there have to be limits to that (MD5).

Many participants saw the request as a means for achieving quick closure to the visit. The request, in effect, would allow physicians to arrive more efficiently at their goal of treating the patient without spending time on convincing them of the

diagnosis and the need for medication. This was seen as especially important for an illness that can be stigmatizing and for which adherence to long-term treatment can be problematic. The request enhanced the perceived efficiency of the visit in multiple ways: some saw it as an escape route: shortening the visit through more rapid diagnosis and more truncated treatment-related discussions, and at the same time avoiding conflict with the patient. Others used the request to avoid "splitting the hairs [by not having to decide]—is it depression or ...adjustment disorder" (MD4)—in that sense, the request promoted "diagnostic laziness" (MD4). One participant described the request as a "refreshing" surprise "to have someone come in already wanting to take an antidepressant ... Something that you're always pushing on people that don't want to take it..." (MD15).

A large number of participants saw the request as a prompt to engage in further diagnostic probing or patient education. The request gave them a clue to "...sit up and take notice" (MD1), "... to make sure I'm not missing something" (MD2), or to get "...further along the diagnostic path than I would be ordinarily [without having to] elicit symptoms from the patient" (MD1). One third said that, in response to the request, they would attempt to educate patients and 13 said they would attempt to convince the patient to consider an alternative treatment option, such as psychotherapy. In particular, readily available in-house psychotherapists at one of the sites provided for a quick second opinion and nonpharmacologic therapy.

Participants' Interpretations of Patients' Self-Diagnoses

More than half of the participants seemed to assume that the patient diagnosed herself correctly based on a DTCA; fewer participants reported that they ignored the self-diagnosis completely. Upon reflection, about half of the participants noted the dangers of making the assumption that patients' self-diagnoses were appropriate.

Less than a quarter of the participants appeared to doubt the accuracy of the self-diagnosis based on prior experience of inappropriate requests for medications. A small number mentioned the frustration of having to convince patients that they did not need an antidepressant, spending time to disprove the patient's conviction.

Self-awareness

About one third of the participants reported awareness that their judgment had been skewed by the patient's request. A much smaller number reported that requests tended to make them less systematic and more prone to bias when compared to situations in which they were consciously evaluating the quality of care. Working alone, 1 participant described making quicker assessments, using "...more of a gut feeling" (MD3) whereas when supervising trainees "...I ask more questions" (MD3). Another reported feeling "lazy with some of these ...is it adjustment disorder or depression? Either way ...you can treat them with Paxil. You're not gonna hurt them" (MD4). The same participant commented on his greater vigilance in teaching settings: "I'm so much more academic [and] thorough ... when I have medical students and residents with me" (MD4).

At least 1 participant initially denied that a request affected his diagnostic impressions, but later in the discussion,

revealed that he may not have been as impervious as he initially expressed:

In my busy morning, am I gonna really have time to do a thorough assessment of all their symptoms, or should I just take it as, well they've assessed their symptoms this way? So, it does [affect my diagnostic impression] (MD1).

Reflecting on this statement, another proposed "...the next time a patient mentions a drug ad, I'm going to have a little tape that runs in my head that says 'OK, step back, make believe you're reviewing this chart, and do it by the book.'" (MD2).

Contextual Factors Impacting Attention to Patients' Requests

Contextual factors included DTCA marketing tactics, clinical load, and whether the patient was new or established. Nearly half of the participants expressed susceptibility to marketing tactics, one of whom stated that ... "[patients are like] drug reps in your office...bought by the ad" (MD6). Health systems factors also had an effect; rapid closure of the visit was welcomed when these participants felt pressed for time. It is interesting to note that not all agreed about their relative propensity to prescribe for new patients versus those with whom they had a preexisting relationship. A number reasoned that new patients might be more depressed than they appeared because of reluctance to disclose the severity of their depressive symptoms. One, however, was less likely to prescribe for new patients; he first wanted to develop a strong relationship within which he would be more likely to understand the full impact of the patient's distress.

DISCUSSION

Our study provides data from a small sample of physicians about the complex relationship between patient requests and these physicians' subsequent behavior. Using data from 6 focus groups with 22 participants, we have described some of the affective and cognitive mechanisms and some of the attitudinal and contextual factors which influenced participants' clinical judgment and decision to prescribe. We found that some were initially unaware of the degree to which their reasoning was swayed by patient requests until prompted in a setting that facilitated reflection.

Other studies that trained patients to ask questions and be assertive have also noted some patient-physician friction as a result of the intervention,²⁰⁻²² and that the benefits of assertive patient behavior (e.g., greater patient involvement in decision making) are observed only when physicians adopt a "patient-centered" attitude.²³ Consistent with these studies, we found that the most commonly observed affective response to patient requests was annoyance because of the disruption of usual routines or encroachment on physician authority. DTCA-driven patient self-diagnosis was considered especially noxious because participants perceived encroachment by patients and also by pharmaceutical companies who were able to sway patient self-assessments. Reactions to that annoyance determined whether the request led to further inquiry to

establish a more conclusive diagnosis or to acquiesce to the patient's request to move on to the next patient.

Participants commonly used 3 cognitive strategies to justify complying with patient requests that they viewed as inappropriate. First, some prescribed to establish rapport. There may, however, be more effective ways of developing rapport without the dangers of inappropriate prescribing.^{24,25} Relationship-centered methods of developing rapport include eliciting patients' ideas and expectations, using empathy, presenting choices, and supporting patient autonomy in decision making. Second, participants assumed that complying with the request would save time, avoid conflict, or achieve an earlier closure of the visit—assumptions which were not supported by a retrospective analysis of data from the SIP study. The data showed that visits in which requests were granted were no shorter than those in which requests were denied. The third involved the misapplication of a “representativeness heuristic”—drawing generalizations from limited prior experience.²⁶ Participants expected to encounter patient resistance to the use of antidepressants. When there was an explicit request for antidepressants and a lack of expected resistance, it was inappropriately assumed that the patient must need the medication.

Existing theories and models of decision making can help elucidate our findings. Sound clinical judgment depends on both affective and cognitive processes, which are inextricably linked in the formation of memory, heuristics, and reason.^{27–29} These have been conceptualized using different terminologies; however, theories converge over the use of 2 primary modes of affective and cognitive decision processes that are consistent with our observations. The first mode is script-driven, using intuitive heuristics in a fast and effortless way; the second mode is deliberative, using slower, rational processes in a more careful and effortful way.^{30,31} Script-driven processes consist of elaborated compilations of knowledge and experience characteristic of expert practitioners.^{32–34} Deliberative processes, in contrast, might use pretest probabilities and decision thresholds.³⁵ In our study, there was little evidence of use of these formal quantitative probability approaches. Our observations suggest that when choosing to “err on the side of

overtreating”, focus group participants implicitly considered disease likelihoods and side effect risks, although they did not explicitly estimate probabilities or calculate thresholds. Employing only script-driven processes can lead to errors involving misapplication of heuristics, whereas deliberative processes are too slow for routine use and sometimes ignore the “gist information” often used by experts.³⁶ We observed that patient requests may sometimes disrupt the balanced application of these 2 modes. Treatment decisions are further influenced by 3 domains: patient characteristics and values, experience and knowledge, and external clinical evidence.³⁷ Whereas in acute conditions, clinical evidence and physician knowledge have the most influence, in chronic conditions, such as depression, patient characteristics and attitudes are much more important in the decision process, which is consistent with our focus group findings.

The lack of conscious awareness of the influence of DTCA-driven patient requests may increase vulnerability to pharmaceutical companies' efforts to alter physician behavior without decreasing perceived autonomy. As we have noted, 1 characteristic of expertise is having the ability to make rapid intuitive script-driven decisions based on limited information.³⁶ When unexamined, this process appears to be problematic in the face of unclear or ambiguous requests for medications.

During the focus groups, most participants were able to identify extrinsic influences on their thought processes and describe actions they might take to improve their clinical judgment. They were often able to articulate the strategies they were using by hypothetically considering differences between their own clinical behavior and what they would suggest if they were in supervisory roles. “Metacognition” is a term used to describe the ability to observe one's own thinking as if an external observer were present.³⁸ In principle, if patients' requests trigger cognitive scripts that tend to favor inappropriate prescribing, physicians who develop a greater metacognitive self-awareness of these influences can promote more appropriate responses to these requests. The focus group discussions provided hope that this level of self-awareness is possible. It remains to be seen to what degree physicians, in general, can

Figure 1. Influence of patients' requests on physicians' prescribing.

achieve sufficient self-awareness in real clinical settings and recalibrate their impressions to improve quality of care.³⁹

Synthesis of Themes and Proposed Framework

We present a framework for understanding influences on physician decision-making in response to patients' requests (Fig. 1). It represents a hypothesis that requires further empirical study, but is consistent with the data from the present analysis. Direct responses to requests are made through script-driven processes, conditioned by affective factors such as annoyance or empathy, and through more deliberative, cognitive processes such as choosing to "err on the side of overtreating." Patient characteristics, such as attitude and perceived severity of illness, have a greater than usual influence on physicians' prescribing decisions for chronic conditions like depression. Assumptions based on prior experience with inaccurate self-diagnoses may make it more likely that a patient's self-diagnosis is rejected. Conversely, assumptions based on prior experience of encountering resistance to taking antidepressants may make it more likely that a prescription is made. In addition, contextual factors (such as time pressure) and metacognitive self-awareness influence whether a physician would use a script-driven approach or a deliberative approach to clinical reasoning. All these factors played a role in whether the physician explored the patient's concern further or made a premature move toward closure.

Limitations

The physicians in our study may not have been representative of the larger primary care physician population for several reasons. Participants were a subsample of those who participated in the SIP study who constituted only a subsample of the primary care physician population. SIP study participants may have had greater than average confidence in their clinical skills and might have been more willing to reveal aspects of their thought processes. Physicians from other cities, practice settings, and health systems with different patient populations might have responded differently. Despite these limitations, we used SIP participants because they all had a common experience of an SP antidepressant medication request.

Two of the focus groups were conducted by telephone, so that we were unable to see the nonverbal aspects of communication related to the discussion of prescribing behaviors. In spite of the different methods of focus group moderation, our findings across the 6 focus groups were consistent. The most significant limitation of our study is our 22% recruitment rate for from the SIP study; however, because this is one of the first studies of its kind to examine reflection on decision-making behaviors related to prescribing, we believe the data it generated is of interest. Larger, more representative samples would have to be drawn and analyzed to reach more generalizable conclusions about physician prescribing behaviors.

Several other limitations are noteworthy. The extent to which discussions reflected actual cognitive processes is uncertain, and more than a year had passed since the most recent SIP visit. Most participants did, however, view verbatim video reenactments and felt adequately familiarized with the study protocol. Some participants may have felt uncomfortable disclosing responses among colleagues, but a review of transcripts suggests that all participants were actively engaged.

CONCLUSION

For the physicians who participated in the focus groups, patient requests for medications created a variety of affective and cognitive responses conditioned by contextual factors such as time constraints, participants' attitudes and self-awareness, and patients' severity of illness. These responses can sometimes improve the quality of care by fostering exploration of patients' symptoms or threaten it by encouraging a prescription to establish rapport or save time. Avoiding potential problems can be achieved by being aware of, anticipating, and reflecting on the ways that requests alter their clinical actions. Developing a model that includes relevant clinician, patient, and contextual features can provide a framework for future research. The model could guide interventions to enhance physicians' awareness and use of patients' requests to achieve mutual understanding, accurate diagnoses, appropriate prescribing, and improved outcomes.

Acknowledgements: The authors would like to express their gratitude to Camille S. Cipri and Judy Lardner for their assistance with recruitment and project coordination, and to all the physicians who took the time out of their schedules to participate in these focus groups.

This research was funded by the National Institute of Mental Health 5 R01 MH064683-03, RL Kravitz, PI.

Conflict of Interest: None disclosed.

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