Communication Discrepancies Between Physicians and Hospitalized Patients

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Background: Hospital surveys indicate lack of patient awareness of diagnoses and treatments, yet physicians report they effectively communicate with patients. Gaps in understanding and communication could result in decreased quality of care. We sought to assess patient knowledge and perspectives of inpatient care and determine differences from physician assessments.

Methods: Two validated questionnaires assessed the experiences of inpatients treated by house staff from October 10, 2008, through June 23, 2009. We surveyed corresponding internal medicine resident and attending physicians, asking them to report on their care of hospitalized patients and their understanding of their patients' perspectives on the care received.

Results: Eighty-nine patients and 43 physicians participated. Although 73% of patients thought there was 1 main physician, 18% correctly named that physician, compared with 67% of physicians who thought patients knew their names ($P < .001$). Most physicians (77%) believed patients knew their diagnosis; however, 57% of patients did ($P < .001$). A total of 58% of patients thought that physicians always explained things in a comprehensible way, compared with 21% of physicians who stated they always provided explanations of some kind ($P < .001$). Two-thirds of patients reported receiving a new medication in the hospital, yet 90% noted never being told of any adverse effects of these medications. Nearly all physicians (98%) stated that they at least sometimes discussed their patients’ fears and anxieties, compared with 54% of patients who said their physicians never did this ($P = .001$).

Conclusions: Significant differences exist between patients' and physicians' impressions about patient knowledge and inpatient care received. Steps to improve patient-physician communication should be identified and implemented.

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Study Design and Sample

This cross-sectional study occurred at Waterbury Hospital, a 367-bed, private, not-for-profit community teaching hospital in Waterbury, Connecticut. The hospital hosts inpatient rotations for 4 internal medicine residency programs from the Yale University School of Medicine. Patients treated by house staff and their physicians were asked to participate in the study from October 10, 2008, through June 23, 2009. House staff teams consisted of 1 attending physician, 1 resident, 1 primary intern, and a secondary intern who cared for patients on postcall and select weekend days during the entire rotation. (The postcall designation is given to the shift worked by house staff who have just completed a 24-hour admitting cycle.) We recruited patients in the morning by asking teaching teams to name patients who would be discharged that day. We chose interview days at random based on our availability and interviewed on weekdays and weekends. We interviewed all patients on the day of discharge and only those who had a length of stay of at least 2 days. Because teaching teams switch rotations every day, we did not interview patients within 1 week of team change. In addition, because we wanted to interview patients who were cared for only by the primary team, we did not interview patients who were cared for on a weekend by the secondary intern only. Patient demographics reflected those of the overall hospitalized adult patient population, namely, adults aged 18 to 95 years of all races, religions, and nationalities who spoke English or Spanish. We excluded patients who had worked at the hospital in the past and those with potentially impaired decision-making capacity (ie, those with schizophrenia, mental disabilities, or dementia, those in police custody, wards of the state, and those with altered mental status). No member of the research team had any patient care responsibilities (outpatient or inpatient) for those being surveyed. One of the study authors asked patients who met the inclusion criteria to participate in the study and to sign a written consent form to participate. Interviewers did not wear white coats or introduce themselves as physicians during the interviews.

We contacted physicians at the end of their inpatient month to ask for their participation in the study. Interviews occurred individually in a private setting after a written consent form had been signed. Attending physicians were a mix of generalists, hospitalists, and medicine subspecialists. House staff were resident and intern physicians in the primary care internal medicine, traditional medicine, medicine-pediatrics, or medicine-neurology program doing an inpatient medicine rotation at the hospital. We compared physician responses to questions about care with patient responses in an aggregate manner. The Waterbury Hospital institutional review board and the Yale University School of Medicine Human Investigations Committee approved the study protocol.

Survey Instruments

We used 2 well-validated Likert-style instruments to assess patients’ experiences in a teaching hospital: the Picker Patient Experience Questionnaire11 and the Consumer Assessment of Healthcare Providers and Systems Hospital Survey (HCAHPS).12,13 Interviewers read questions and response choices to each patient, and answers were recorded on the survey instrument. Responses to questions were based on the appropriate responses for each questionnaire. Given our interest in exploring differences in patient-physician communication, we report only on questions in these instruments related to our objective. Demographic and other medical information was obtained by each researcher at the time of discharge during the interview and from a review of the patient’s current hospital medical record. We asked patients during the interview to state their diagnosis for admission. For this question, we allowed for lay terms and for any secondary diagnoses listed as current problems during each patient’s hospital stay to be qualifying answers. Using rephrased questions from these 2 instruments, we surveyed corresponding residents, interns, and attending physicians, asking them to tell us about the care they provided their patients during the month rotation and to provide their opinions regarding their overall patients’ perspectives and knowledge of the care received (Figure 1 and Figure 2). We did not share patient responses with the physicians or physician responses with patients.

Statistical Analyses

We deidentified data and stored them in a Microsoft Excel 2007 database (Microsoft Corporation, Redmond, Washington). We used Stata statistical software, release 10.1 (StataCorp LP, College Station, Texas).
RESULTS

Of 95 eligible patients asked to participate in the survey, 89 (94%) agreed. All 43 physicians (100%) asked to participate in the survey consented. The Table provides demographic information on participating patients and physicians. Patients stated they had an average of 5.1 physicians caring for them throughout their stay; their average length of stay was 5.4 days (range, 2.0-36.0 days).

KNOWLEDGE OF PHYSICIAN AND DIAGNOSIS

In response to the question, “Would you say there is one main doctor in charge of your care?” 23 patients (26%) said no, 65 (73%) said yes, and 1 (1%) was not sure. Only 22 (25%) patients who stated there was 1 main physician could correctly name him or her. Thus, only 16 of all 89 patients (18%) correctly identified the physician in charge of their care. This result contrasts with the finding that 28 (67%) physicians thought patients knew their names.

Only 51 (57%) patients could correctly state their diagnosis, with 38 (43%) not knowing or incorrectly stating their reason for admission. This compares with 69 (77%) physicians who thought their patients understood their diagnosis at least somewhat well. This finding was statistically significantly different compared with patient responses (P < .001).

COMMUNICATION ABOUT MEDICATION AND TREATMENT

Sixty patients (67%) reported receiving a new medication in the hospital that they had not previously taken. Of those patients, 15 (25%) stated that their physicians never told them they were receiving a new medication. In comparison, all physicians stated they at least sometimes inform patients of new medications (P = .04) (Figure 1A). Regarding medication adverse effects, 90% of patients reported never being told of adverse effects for new medications, compared with 19% of physicians who stated they never discuss adverse effects of medications with patients (P < .001) (Figure 1B).

As a group, patients believed they were adequately involved in decisions made about their care and treatment; 61 patients (69%) stated that they did not want to become more involved in their care. Physicians differed in their opinion, such that only 1 physician (2%) believed patients did not want to become more involved (P < .001) (Figure 1C).

PSYCHOSOCIAL INTERACTIONS AND COMMUNICATION OVERALL

Although 78 patients (88%) indicated that physicians never spoke in front of patients without including them in the conversation, 16 physicians (37%) reported they had never done so (P < .001) (Figure 2A). Compared with physicians, a greater number of patients believed information delivered by their physician was completely comprehensible. Fifty-two patients (58%) believed physicians always gave explanations in a way they could understand, whereas only a few physicians, 9 (21%), thought they always did so (P < .001) (Figure 2B).

Half of patients reported having anxieties or fears while in the hospital. Of those who had anxiety or fear, 25 (54%) stated physicians never discussed these fears with them. This compares with 1 physician (2%) who reported never...
discussing patients’ anxiety or fears with them (P < .001) (Figure 2C).

SUBGROUP ANALYSES

We analyzed patient responses to questions to determine whether any differences existed based on demographic factors. No statistically significant differences existed among survey results when analyzed by sex, age, race, and payment source (Medicaid vs other sources). When educational level was analyzed, however, patients with completion of less than an eighth-grade education thought their fears and anxieties were discussed less frequently (P=.02). Because of a large variation in patient diagnoses, we were unable to make comparisons based on medical complexity. Physicians responded similarly to all questions except that attending physicians were more likely to report they usually or always explain medication adverse effects to patients (57% of attending physicians vs 30% of residents and 13% of interns) (P=.02).

COMMENT

These data show that significant differences exist between patients’ and physicians’ impressions about patient knowledge and care received in the hospital. This is the first study, to our knowledge, to directly compare the impressions of each group with regard to an inpatient hospitalization. Interestingly, most subgroup analyses did not affect patient responses, showing uniformity in opinions regardless of sex, age, race, language, or payment source. In addition, responses by physicians were uniform despite level and type of training.

The finding that a large percentage of patients cannot identify the physician in charge of their care is not new. A recent study by Arora et al5 showed that only 25% of patients in a large, urban teaching hospital could identify any inpatient physician caring for them, which reinforced results from a prior study6 performed at a large, public teaching hospital in Brooklyn, New York, which revealed that only 14.7% of patients could correctly state their physician’s name. The present study adds to these results because it was conducted at a not-for-profit community teaching hospital and showed that only 18% of patients were able to identify the physician in charge of their care. It appears that regardless of the setting, multiple studies at multiple institutions are in close agreement that, at best, only 1 in 4 patients can identify the physicians caring for them.

Patient and physician perceptions differed greatly with respect to patients’ knowledge and understanding of their diagnosis. Not only did 68 (77%) physicians think that patients could name their diagnosis, they thought patients understood their diagnosis at least somewhat well. Nevertheless, only 51 (57%) patients could name their diagnosis on the day of discharge. Although our results are similar to the study by Makaryus and Friedman,6 which showed that 41.9% of patients could state their diagnosis at discharge, our data demonstrate statistically significant differences between physician and patient perceptions about this knowledge. With an average length of stay of 5.4 days for patients in our study, it appears there is ample time to better educate patients about why they are in the hospital.

Patients and physicians also differed in their opinions regarding care provided. Despite 89 physicians (100%) stating they at least sometimes tell patients when new medicines are prescribed, only 67 patients (75%) recall ever being told of these new medications. Similarly, although 72 physicians (81%) stated they describe adverse effects at least some of the time, only 9 patients...
(10%) reported being told of any medication adverse effects. Finally, although only 19 physicians (21%) thought they always explained things in a way their patients could understand, almost triple this number of patients (52 [58%]) thought physicians always did this. It seems that most patients are pleased with explanations offered by their physicians. Yet, although 52 patients (58%) believed they always understood what the physician said, only 51 (57%) could correctly name their diagnosis.

Differences in patient and physician perceptions about care are critical in addressing problems with health care provision. Lack of understanding of the communication gap between groups decreases the likelihood of providing safe, effective, equitable, patient-centered care. Our results suggest that physicians are not discussing patients’ diagnoses and treatment, which would be unexpected, or that patients are not retaining what they are told. Taken together, these data imply that physicians may have to both verbally explain diagnoses, medications, treatment plans, and discharge instructions and provide visual or written information for patients to have true functional comprehension of these topics. Improvement in health care provision must rely on integration of information technology into daily patient care. Patient-level information given to patients by the physician, printed from a computer at the bedside describing their diagnosis and identifying their physicians, may be a way to reinforce verbal communication between the physician and patient. It may, however, also add another barrier of effective health literacy for some patients. Using pictures or video may also help decrease the communication gap. Studies show that patients have improved comprehension of discharge instructions when they are shown pictographs or videos. Tait et al have already demonstrated that interactive videos improve informed consent.

Limitations to our study should be considered. First, this study occurred at a single institution, and multiple institutional variables may have contributed to our results. Second, the patient population surveyed was older, indigent, and poorly educated compared with the population of the United States as a whole; thus, it may be difficult to generalize our results to other patient populations. Third, the survey instruments, the Picker Patient Experience Survey and the HCAHPS, are designed to be postdischarge surveys. Although HCAHPS can be administered to patients by telephone, we conducted face-to-face interviews as the patient was awaiting discharge. In addition, because the response rate to posthospitalization surveys is low (ranging from 21% to 41%), we opted to conduct the surveys in person while the patient was awaiting discharge. In this way, we were able to capture data from a larger population of patients, including those who may not respond to posthospitalization surveys. Our methods subsequently led to a high response rate. Fourth, physician questionnaires were adapted from validated patient instruments. This was done because, to our knowledge, no instruments exist that directly compare physicians’ opinions regarding their care of patients or how patients understand their care with patients’ actual opinions. Although our questions have face validity, no reliability testing was performed. Fifth, our study was not powered to determine differences in secondary outcomes and thus may limit our interpretation of subgroup analyses. Finally, we did not conduct one-to-one patient-physician comparisons; instead, patients were asked about the care they received and physicians were asked about the overall care they provided during that month of service. Because the physicians interviewed were those directly caring for the patients surveyed, their opinions reflected the care they believed their patients received and their understanding of their patients’ knowledge.

It has been almost 2 decades since publication of the landmark work on patient-centered care Through the Patient’s Eyes, a monograph that stressed the need to create a hospital environment where “subjective experience is taken as seriously as more traditional objective data.” Our data show that much work still needs to be done to achieve this goal and that implementing the seemingly simple solution of better communication and interpersonal skills on everyone’s part continues to be a challenge.

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REFERENCES


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**Images From Our Readers**

Monsoons crown the Himalayas, India.

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