Teaching Physicians To Be Patient: A Hospital Admission Experience For Family Practice Residents

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Abstract: ***Background:*** **A program has been developed to sensitize physicians to the discomforts, uncertainties, and anxieties experienced by patients on admission to the hospital, so that greater empathy and increased communication can be fostered with their own hospitalized patients.**

Methods: **For the last 5 years, all incoming family medicine residents at Long Beach, California, Memorial Medical Center have been admitted incognito to the hospital during their first day in the residency. Hospitalized residents are assigned an admission diagnosis and an associated disability, given a pseudonym, and provided with fabricated insurance information (by the hospital administration) to facilitate their admission. Each incoming group of 6 residents is admitted over the course of an afternoon and evening and discharged the next morning. Residents evaluated the admission experience by means of before-and-after questionnaires. They and residency graduates also responded to a follow-up survey instrument that asked participants to assess the program's long-term educational impact (response rate, 100 percent; n = 30).**

Results: **Although the program is carried out annually, we have been able to admit the residents to this large (998 beds) medical center typically without their identities being discovered, resulting in a realistic educational experience. While diagnoses are contrived, the discomforts are real, and participants become acutely aware of the loneliness, pain (e.g., from intravenous lines), and uncertainty experienced by patients. Long-term effects on day-to-day practice attributed to the program by residents and graduates include minimizing orders for nonessential tests and middle-of-the-night examinations and keeping patients well-informed (especially letting them know when they will be seen by the physician).**

Conclusions: **The effort, logistical problems, and costs associated with hospitalization of incoming residents disguised as patients appear to be offset by the admission program's long-term impact on participants' sensitivity regarding experiences undergone by hospitalized patients and their awareness of their role in helping to ameliorate discomforts associated with hospital admission. Strong support from the hospital administration, however, is essential to the success of this type of program. (J Am Board Fam Pract 1992; 5:581-88.)**

The enhancement of physicians' compassion and sensitivity to the needs of their hospitalized patients constitutes a key educational objective in family practice residency training. A number of studies have described a dehumanization process that occurs between entry to and graduation from medical school, characterized by a decline in empathy toward patients.[1-5] A study carried out among medical interns in the early 1980s indicated that this process appears to carry over into the first year of residency training, reflected in "a worsening view of the doctor-patient relationship as the year progressed."[6 p 1099]

The Report of the Panel on General Professional Education of the Physician has recommended that values and concerns that promote caring and concern for the patient be emphasized at least to the same extent as the acquisition of knowledge.[7] Perhaps the principal impediment to such an emphasis is the belief that "nothing conscious can be done about dehumanization — that a doctor either cares about his patient's humanness or doesn't."[8 p 1832]

Pellegrino[9,10] differentiates between cognitive and affective dimensions of humanism, each of which suggests a substantively different educational approach. The cognitive dimension deals with the physician as a person and with his or

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her cultural ideals, values, and modes of expression. Recognizing the importance of this aspect has led to a substantial increase in programs on human values, ethics, or humanities in medical school curricula.[11,12] The affective dimension, however, is more commonly targeted by critics of the health care system, who equate humanism with compassion. As Pellegrino notes, "Compassion means co-suffering, the capacity and the willingness of the physician somehow to share in the pain and anguish of those who seek help from him."[9 p 1289]

Clearly, this latter dimension cannot be addressed merely by an increased emphasis on the humanities[13]; rather, enhancing sensitivity and empathy require that the physician engage in enactive learning[14] by "walking in the patient's slippers." Previous efforts to provide this type of experience by exposing medical students to hospitalization by means of 24-hour admissions include one from Australia in which the students' identities were known, but participating hospital staff were instructed to treat them in accordance with a written description of their supposed malady carried with them into the hospital.[15] A second effort came from Israel, where students simulated their conditions in incognito admissions; their true identities were discovered within a few hours, however, as a result of lack of complete administrative documentation.[16]

A pilot project that involved hospitalizing residents was conducted at Presbyterian Hospital of Pacific Medical Center in San Francisco in 1976 (William Harless, Ph.D., personal communication, November 1991) but, like the student experiences cited above, was never repeated because of lack of administrative support for the project. The ongoing hospital admission program at Long Beach Memorial Medical Center Family Practice Residency Program (described below) is, therefore, a unique educational experience in residency training.

Evolution of the Admission Program

The hospital admission program, begun at the Long Beach Memorial Medical Center Family Practice Residency in 1987, is designed not only to provide incoming residents with an experience approximating that of actual patients who are admitted to the Medical Center but also to orient the residents to the day-to-day functioning of the hospital where they will continue their training. The primary goal of the program is to enhance participants' sensitivity and empathy toward their hospitalized patients while the residents are in training and subsequently in private practice. The program, which was prompted by the experiences of the residency director when he was hospitalized for treatment of an eye injury while a medical student, occurs on the first day of orientation week for incoming residents (the last week in June) before they can be recognized as a member of the house staff. During the afternoon and evening hours (1500 to 2000) of their first day, the residents are admitted to the Long Beach Memorial Medical Center by community physicians affiliated with the residency program; they remain in the hospital for approximately 18 hours and are discharged the next morning. Residents are also assigned a drug regimen to be followed for the entire week (using a placebo) to illustrate the difficulty in complying with medication instructions as an outpatient.

The admission is also used as an opportunity to conduct incoming residents' preemployment physical examinations and to obtain laboratory tests, and the new residents are encouraged to form an ongoing primary care relationship with their admitting physicians. The supervisors of the admissions office, accounting department, and nursing staff are all participants in the program, but the residents' actual identities remain unknown to other hospital staff, helped in part by admissions being limited to one or two per department in the 998-bed medical center. In addition to a pseudonym, the residents are supplied with fabricated insurance information by the admissions office to avoid questions or discrepancies in the accompanying documentation.

Although this basic structure has remained the same during the program's 5-year history, the nature of the admitting orders were modified based on initial experiences. In the 1st year of the program, members of the 6-resident incoming class were all admitted as human immunodeficiency virus (HIV)-positive volunteers for an in-hospital study of acquired immunodeficiency syndrome (AIDS). The diagnosis had been anticipated to result in a heightened sense of isolation on the part of the residents, who offered varying stories when questioned by

nurses about how they might have acquired the disease. All 3 male residents said they were either homosexual or bisexual, 2 of the 3 female residents told nurses they had acquired HIV from their boyfriends, and the 3rd said she could have become infected following a needle stick at a free clinic. Although residents did undergo the embarrassment and discomfort experienced by patients admitted to the hospital, it was not as isolating an experience as initially thought. One of the female residents reported,

> The nurses were very caring. They were more concerned about my comfort and support system and how I was dealing with my illness than I expected. They were not put off by my diagnosis. I was really pleased.

Similarly, one of the male residents, supposedly a homosexual, said,

> The nurses were not there judging us. They were there to help us in any way they could. They were very supportive. I was surprised they did not distance themselves from us, knowing that we could have AIDS.

Although these positive experiences reflected well on the attitudes of the nursing staff, that all of the residents ended up on the same ward led to using different diagnoses in the program's 2nd year, with the result that residents were placed on wards with other hospital patients. One resident pretended to be suicidal and depressed, another was drug addicted, a 3rd came in with chest pains, a 4th with abdominal pain, a 5th for subdural hemorrhage, and the last for fever and lethargy — rule out AIDS. Beginning in the program's 3rd year, residents were assigned a disability as well as a diagnosis so their level of discomfort would more closely reflect that of many hospitalized patients. These disabilities included blindness, hearing impairment, muteness, being placed in traction, having a cast on the dominant arm, or wearing a full leg cast. Admitting orders also specified dietary restrictions, body fluid precautions, and restrictions on mobility. One incoming resident, for example, was admitted as an orthopedic patient with a disk problem and pinched nerve. He was hooked up to an intravenous line, confined to bed, required to use a bedside commode, and to ambulate only with assistance. Assigned diagnoses and associated disabilities for the most recent incoming class are shown in Table 1.

Residents are asked to maintain their assigned identity and accompanying disability throughout their hospital stay. They are instructed to feign symptoms of their ailments and to develop a plausible medical history, and some are outfitted with devices to simulate conditions, such as body casts for injuries or eye patches for blindness.

Despite this preparation, lapses can occur. One resident, whose assigned symptoms included psychotic depression and muteness, as well as suicidal ideation, was admitted to the psychiatric ward — but not before she accidentally revealed her cover to a receptionist.

> I walked in the door and blew it the first thing. I handed my piece of paper (explaining the muteness) to the receptionist, and she asked, "Where are you supposed to go?" and I answered, "Well, I don't know."

The resident then had to confide in the receptionist by explaining the program and requesting her cooperation; she subsequently resumed her role as a mute patient.

Another participant, admitted with a diagnosis of hematemesis, became convinced that the nurses knew he was a resident. He indicated that his "cover was blown the minute they checked my lab values, if not sooner." For most residents, however, their assigned patient roles were not difficult to maintain during the course of the hospitalization, and in the case of those fitted with arm or leg casts, the disability was inescapable.

Table 1. Admission Assignments for Hospitalized Residents: 1991 Incoming Class.*

Pseudonym	Physical Diagnosis	Admission Disability
Danielle Wilson	Mental status change	Fractured forearm
Lee Johnson	Chest pain — atypical	Fractured tibia
Gary Wakatsuki	Back pain — intractable	Pelvic traction 10/lb for 3 hr
Rajid Ramini	Right lower quadrant mass — rule out acute abdomen	Corneal abrasion
Roy Brown	Hematemesis — gastritis	Hearing impaired
Carrie White	Acute pelvic pain	Right knee strain

*Note: Examples of diagnoses no longer utilized include psychotic depression, cocaine abuse, and intravenous drug abuse.

As a result of these preparations, the hospital nursing staff has no knowledge of which among their hospitalized patients are really physicians and presumably care for residents as they care for other admitted patients. (To prevent medical mishaps, the admitting physicians, who are chosen from among residency graduates, are active participants in the program.)

There have, however, been occasional complaints directed at the program over the years, notably from the emergency department, where a staff nurse objected to a resident having competed for time and resources with real patients. As a result, emergency department admissions have been dropped from the program.

The Long Beach Memorial Medical Center administration has been supportive of the program during its 5-year history, recognizing its value as a teaching mechanism and its potential quality-control function. Follow-up letters, especially to nursing staff, have been used each year to reinforce the educational as well as patient care function of teaching hospitals such as ours. The letters also serve to acquaint hospital staff with the educational objectives of the admission experience and to express appreciation for their role in providing care to participants. The cost of the program, primarily reflecting labor input, has not been calculated directly, but residents do receive hospital bills (absorbed by the medical center) as part of the simulation. Recently these bills have averaged just over $1000 for most residents for a semiprivate room, plus laboratory charges and charges for solutions and supplies. One resident, who was hospitalized as an accident victim with a broken leg and chest pain, had a bill of just over $1800 based on his stay in a chest pain intensive care unit and additional laboratory work.

Project Evaluation

Evaluation of the admission experience has involved four components, incorporating both process variables and measures of educational impact: a before-and-after questionnaire that elicits residents' views of the physician's role in relation to hospitalized patients and their perceptions of patients' wants and needs, residents' verbatim reactions to the experience as voiced during a debriefing session immediately following their discharge from the hospital, responses to a short evaluation form filled out at that time, and a follow-up questionnaire sent to all residents and residency graduates who have undergone the admission experience over its 5-year history designed to assess the long-term educational impact of the program. The completion rate for the follow-up evaluation has been 100 percent (30 of 30).

Most of the evaluation results are reported in the form of word-for-word responses to open-ended questions, while a few questions elicited categorical responses. Although based on just 30 resident-participants, the latter findings are reported in the form of percentages in the interest of convenience and uniformity. Statistical significance of before-after hospitalization differences in questionnaire responses was calculated using the McNemar change test; other differences were calculated by means of the chi-square test.[17]

Comparison of Physician's Perspective

Before their hospitalization, 37 percent of incoming residents indicated that they understood what patients go through when they enter the hospital, 53 percent said they did not, and 10 percent were undecided. One-third of the former figure was accounted for by residents who had either been previously admitted or had accompanied relatives through hospital admissions. After the admission experience, 77 percent said that they understood what patients go through and 23 percent thought that they still did not ($P = 0.003$).

Residents who believed that they had gained an understanding of what patients go through cited the admission process itself, along with feelings of anxiety, loneliness, and boredom, difficulty sleeping, and the restrictiveness of having intravenous lines in place. Those who said that the admission did not permit them to comprehend what patients go through pointed out that they were free of the pain and fear that often accompany hospitalization. One resident noted, "It is impossible to completely understand the pain, fear, and frustration each patient experiences." Another observed, "Perhaps I have a better understanding, but there were no monetary worries, no worries about family, personal health, and I *knew* I could go home the *next day*!" (emphasis in original).

Residents' perceptions of the physician's role and priorities when admitting a patient revealed a shift in emphasis as a result of the admission experience. Whereas before admission participants listed the physician's role as patient educator and the physician's responsibility to address psychosocial issues, as well as activities related to establishing a diagnosis and treatment plan, postadmission responses assigned the physician to a more active role in (1) facilitating the admission process, (2) explaining what to expect, including the reasons for medications and intravenous lines, (3) attempting to alleviate the patient's fears and anxieties, and (4) generally acting as the patient's advocate. In short, participants wanted their admitting physicians to be more available and accessible while they were being admitted.

Before their admission, the issues participants said they would address with a patient before hospitalization were led by the reason for admission and treatment plan, followed by an estimated length of stay, explanations of diagnostic tests, discussion of the patient's fears and anxieties, and the prognosis or expected outcome. Several residents mentioned telling the patient what to expect within the hospital, but only one covered what would happen during admission. Subsequent to their admission, participants were more likely to include the admission process itself and the possibility of delays, loneliness, frustration, and boredom connected with the hospital stay. One resident said that patients should be "forewarned of middle-of-the-night procedures like vital sign checks, discomfort of IV lines, [and] nasal prongs" and should be informed when the physician will be in to see them.

Conceptions of the Patient Experience

Nearly all residents agreed even before their admission that being hospitalized is not an opportunity for patients to take some time off and relax. After their experiences, many provided concrete examples, noting that there are interruptions throughout the day for various procedures and a good deal of activity and noise even at night. One resident responded, "The lights, the noise, the uncomfortable bed, blood draws, all make relaxation difficult at best." Similarly, residents were aware of the "loss of control" experienced by patients before the residents' own admissions, but more emphatic answers emerged after their discharges. One resident noted both a loss of control over normal daily habits (voiding, diet, physical activity, medications) and the insecurity of not knowing what each treatment procedure is all about. Another observed, "When you are restricted by 'orders' that limit your every move, you assume the passive patient status."

Residents' perceptions of patients' primary concerns and priorities, which had centered on the prognosis and related issues of pain and death before the study admission, subsequently shifted to seemingly more mundane issues of comfort, control, privacy, and uncertainty regarding what was being done and why particular tests were performed. One resident listed patient concerns as, "Will I lose control? Am I allowed to move out of my bed? Will the nurses respond to my calls? Will I get the correct medications? Will I be undressed in front of people?"

Finally, before their admission, the residents thought that information imparted by the nursing staff would include what tests were ordered, the treatment plan, and additional information on procedures and medications. Instead, they found that instructions focused more on orders (limitations, restrictions) and physical operations of call buttons, television controls, and the like.

Postadmission Assessment

Immediately following their discharge, almost all residents evaluated the admission as having been a valuable experience. Seventy percent of participants had not been hospitalized before and 30 percent had, but all agreed that the experience helped them be better physicians. Negative experiences related by residents arose from incidents in which fellow patients in the chemical dependency and mental health units believed that their privacy had been breached when, having confided in a resident "patient," they subsequently discovered their confidant to be a physician — either at the time of the resident's discharge or during a subsequent visit to the medical center. (In response to these concerns, we no longer assign residents to the chemical dependency or mental health units as part of the program.)

Another misgiving residents had concerning the program was the perception that those participants who feigned drug addiction or other behavioral problems as part of their reason for admission might somehow — even if unconsciously — later be stigmatized by association with their patient persona when working with the nursing staff who cared for them. Consequently, a patient role that incorporated only somatic diagnoses and disabilities was regarded by residents as somewhat "safer."

Educational Impact

To measure the long-term educational impact of the program, the 12 residency graduates and 18 current residents who have undergone the admission were asked to reevaluate the program and assess the degree to which it has impacted their subsequent experience in residency training and day-to-day practice.

Seventy-three percent of the participants indicated that they had a positive reaction to the care they received, 7 percent had a negative experience, and the remaining 20 percent were undecided or neutral in their reaction to the experience. These reactions did not vary significantly ($P = 0.88$) with length of time since their admission, which varied from 6 months to 4½ years for the five residency classes. Of those who recalled feeling positive about the care they received, all mentioned the kindness and caring of nursing staff. Seventy-three percent thought that tests and procedures were adequately explained to them, and almost all participants reported that they had been treated in the same manner as other hospitalized patients, indicating that (while some participants might be discovered to be residents) the program basically succeeds in mimicking the actual experiences of hospitalized patients. The most difficult part of the hospitalization, based on these retrospective assessments, was boredom (most often mentioned), followed by loss of mobility and independence (including bathroom privileges), discomfort and noise, and issues of pain and inability to rest attributable to intravenous lines.

When asked whether the admission experience had an impact on their later experiences as a resident, 87 percent of participants indicated that it did and mainly cited their attitude toward ordering tests — e.g., fully explaining why each is done, minimizing blood draws by getting all laboratory studies at once, ordering only those tests that would change therapy and not doing them "just to know." Other effects mentioned were allowing patients as many privileges and as regular a diet as possible, ordering egg-crate mattresses for their comfort, letting patients know approximately what time they make rounds, and avoiding hallway discussions among medical personnel that could be overheard and misinterpreted by worried patients.

When asked whether the experience makes the residents rethink aspects of their day-to-day practice style now, 73 percent said it did. Specific examples were generally the same as those cited above for residency training, but many also mentioned that the admission experience reinforced taking more time to explain and answer questions and fostered more patience with patients who are themselves upset. Other day-to-day practice style results noted were ordering medications to be given only while the patient is awake and being less likely to admit patients in the first place.

Inasmuch as the participant group consisted of 15 men and 15 women, effects of sex on self-reported educational impact of the admission experience were examined. Significant sex differences were found in the impact of the program on their later experiences as a resident ($P = 0.05$) and in effects of the program on their day-to-day practice style ($P = 0.04$), with men in both cases reporting a greater impact. The comparison also showed a near-significant ($P = 0.06$) difference in previous hospitalizations by sex, with men more likely to have had a previous hospital admission.

Finally, when asked what they would do differently with the admission experience, most of the former participants did not have any specific recommendations, although none of them indicated that it was a particularly enjoyable experience. One suggested that they be admitted in the morning so they could experience an entire daily routine rather than spend much of the hospital time sleeping or trying to sleep. The resident who had an assigned diagnosis of hematemesis suggested we use a more believable diagnosis. Another suggested we avoid the emergency department, coronary care unit, and intensive care unit beds, believing that these should be reserved for seriously ill patients (as

noted above, we no longer admit residents through the emergency department) and also proposed that the program exclude residents who have already had multiple hospitalizations (e.g., for chronic illness). A fourth participant questioned the necessity of the program at all, given the already stressful events associated with arrival at the residency.

Discussion

Reports of the admission process and patients' adjustment to hospitalization have documented commonly encountered features of the experience and described those found to be most stressful or anxiety provoking. While the physical setting, inability to rest, and financial concerns all contribute to anxiety, perhaps the most commonly encountered theme centers around inadequate explanation of diagnosis and treatment coupled with the perception of an unconcerned attitude of hospital staff.[18] Patient-centered studies have shown that physicians tend to underestimate their patient's desire for information,[19] and a 1991 American Medical Association survey showed that just 42 percent of respondents thought that physicians explain things well to their patients.[20]

In addition, studies have differentiated between the hospitalized patients' normative need for information (that determined by someone other than the patient) and their subjective need.[21] An effect of this difference was reported in a study that showed that hospitalized patients "with perfectly normal results of chest x-ray examinations were found to be worrying about the result of the investigation because nobody had troubled to tell them."[22 p 1675]

The anxiety level accompanying hospital admission that heightens the patients' need for reassurance became manifest to residents through the admission process when, like typical worried patients, they interpreted idle chit-chat on the part of hospital staff as indicative of an uncaring attitude. Although genuine worries about pain, mortality, and finances are mostly absent from the admission experience, more mundane issues that loom large for the hospitalized patient are very real for participants: the frustration of the admissions waiting room, the loneliness of the patient on the ward, the pain of intravenous lines, restrictions caused by casts or other impediments, and the embarrassment of hospital gowns. In particular, residents gained an appreciation of the overwhelming dependency experienced by the hospitalized patient as a result of the admission.

Other less daunting means are, of course, available to sensitize residents to the concerns and discomforts experienced by patients, e.g., role-playing sessions[23] or standardized patients,[24] but the long-term impact of such teaching methods has not been established,[23] and they appear less likely to achieve the lasting impressions associated with an actual admission. In addition, the admission program serves to bond incoming residents by providing them with parallel experiences that are shared during the course of a postdischarge debriefing. This bonding experience then forms the basis for a group solidarity that would otherwise emerge more slowly during their internship year.

As Peabody[25 p 813-4] pointed out 65 years ago:

> The essence of the practice of medicine is that it is an intensely personal matter, and one of the chief differences between private practice and hospital practice is that the latter always tends to become impersonal.

Enhancing physician empathy is a means of minimizing the perception of impersonality, which is known to be related both to patient satisfaction[26] and adherence to treatment regimens.[27] An ongoing emphasis on teaching empathy has therefore been recommended during both medical school and residency training,[28] although some researchers have questioned whether physicians can be taught to be caring. "A lot of it is in the genes," noted one medical educator.[29]

If, however, physicians can make hospitalized patients feel more personally connected to their own health care outcomes by imparting information and answering questions, and by avoiding the more dehumanizing aspects of hospital care that contribute to a feeling of helplessness, they can then allow the patient to take a more active role in the treatment process. By "walking in the patient's slippers," resident physicians are put in a better position to prevent some of the alienating experiences that can occur in the hospital and can help their patients preserve a sense of independence and control,

which will permit the patients to persevere in contributing to their own health outcomes and personal well-being.

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