An Evidence-Based Perspective on Greetings in Medical Encounters

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Background: Widely used models for teaching and assessing communication skills highlight the importance of greeting patients appropriately, but there is little evidence regarding what constitutes an appropriate greeting.

Methods: To obtain data on patient expectations for greetings, we asked closed-ended questions about preferences for shaking hands, use of patient names, and use of physician names in a computer-assisted telephone survey of adults in the 48 contiguous United States. We also analyzed an existing sample of 123 videotaped new patient visits to characterize patterns of greeting behavior in everyday clinical practice.

Results: Most (78.1%) of the 415 survey respondents reported that they want the physician to shake their hand, 50.4% want their first name to be used when physicians greet them, and 56.4% want physicians to introduce themselves using their first and last names; these expectations vary somewhat with patient sex, age, and race. Videotapes revealed that physicians and patients shook hands in 82.9% of visits. In 50.4% of the initial encounters, physicians did not mention the patient's name at all. Physicians tended to use their first and last names when introducing themselves.

Conclusions: Physicians should be encouraged to shake hands with patients but remain sensitive to nonverbal cues that might indicate whether patients are open to this behavior. Given the diversity of opinion regarding the use of names, coupled with national patient safety recommendations concerning patient identification, we suggest that physicians initially use patients' first and last names and introduce themselves using their own first and last names.

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THE FIRST FEW MOMENTS OF a medical encounter are critical to establishing rapport, making the patient feel comfortable, and setting the tone of the interview.[1-5] Accordingly, widely used models for teaching and assessing communication skills highlight the importance of greeting patients appropriately.[1,6] Physicians and medical students are typically encouraged to shake hands with the patient, address the patient by name, and introduce themselves.[1-9] However, there is little evidence regarding patient perspectives of what constitutes an appropriate greeting (eg, using first names, last names, or both). Similarly, the medical literature is devoid of systematic studies on actual greeting behavior in everyday practice. The purpose of this study was to provide some guidance for medical students, residents, and practicing physicians by defining patient expectations for physician behaviors during the greeting stage of medical visits. We also coded greetings in an existing sample of videotaped medical primary care encounters, examining patterns of behavior to increase the practicality of any recommendations.

METHODS

NATIONAL SURVEY

As part of a larger study designed to identify behavioral signs of professionalism in medicine, we conducted a cross-sectional, random digit–dial, computer-assisted telephone survey of adults in the 48 contiguous United States. The survey was approved by the Northwestern University institutional review board and conducted by trained interviewers at Northwestern University's Institute for Healthcare Studies between December 2, 2004, and February 5, 2005. There were 1489 known active residential numbers in the sampling frame. Callers made up to 7 attempts at each number to reach a respondent, and considered any English-speaking adult who answered the telephone a potential respondent.

To obtain data on patient expectations for greetings, we provided a short introduction ("Doctors need to know what greeting patients appropriately means. How would you

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want doctors to greet you the first time you meet?"), followed by 3 closed-ended questions about specific behaviors: (1) "Would you want them to shake your hand?" (2) "Would you want them to use your first name only, your last name, or both?" and (3) "Should doctors introduce themselves using their first name only, their last name, or both?" This set of questions was followed by 1 open-ended question: "Is there anything else a doctor should do when meeting you for the first time?" Interviewers typed responses to the open-ended question directly into a computer database. All responses were divided into units, which were generally delineated by conjunctions or punctuation. Based on a preliminary review of the unitized responses, we developed coding rules and a coding sheet that included a list of mutually exclusive and exhaustive categories.[10] All responses were analyzed for content by 2 experienced coders, and the few discrepancies were resolved through discussion with 2 members of the research team (G.M. and A.Z.).

VIDEO SAMPLE

In essence, the national survey was designed to evoke patients' standard of care regarding greetings. We also had access to an existing data set of videotaped primary care encounters, which allowed us to explore greeting behaviors in everyday clinical practice. These videotapes were collected for a study of communication and decision making in primary care. The data set included encounters between attending physicians and consecutive patients who were recruited voluntarily from academic primary care practices in Chicago, Ill, and Burlington, Vt. Video collection was approved by institutional review boards at both sites, and all participants provided informed consent. The full data set includes more than 600 videotaped encounters with English-speaking patients.

For this analysis, we focused on initial visits between patients and the study physicians because previous interactions could alter subsequent greetings. Applying this inclusion criterion yielded 123 visits distributed across 19 physicians, 15 in Chicago and 4 in Burlington. One member of the research team (A.Z.) reviewed digitized videos of all 123 visits to determine whether the physician and patient shook hands, if and how the patient was greeted by name, and if and how the physician introduced himself or herself; specific notes were taken about each greeting as part of the coding procedure. While the video coding scheme was extremely straightforward (eg, did the physician and patient shake hands?), a second member of the research team (G.M.) ensured accuracy by double checking the data set against the digital videos. There were no disagreements.

STATISTICAL ANALYSIS

We used a commercially available software package (SPSS, version 14.0; SPSS Inc, Chicago) for data entry and descriptive analysis. We conducted logistic regressions on survey data with STATA SE v9.2 (Stata Corp, College Station, Tex) to determine the relationship between demographic variables (sex, age, race, and education) and patient preferences for shaking hands, use of patient names, and use of physician names. Initial model variables were used to calculate adjusted probabilities and their corresponding confidence intervals, controlling for all variables in the equation. A likelihood ratio χ^2 test determined statistical significance.

RESULTS

Consistent with other recent random digit–dial surveys about health,[11] the call cooperation rate for the national survey was 28%, yielding 415 surveys for analysis. As detailed in **Table 1**, most respondents (63.4%) were female; age ranged from 18 to 88 years. Most survey respondents described their race as white or Caucasian (non-Hispanic), and 9.6% self-identified as black or African American (non-Hispanic). Regarding education, 55.5% of the sample had less than a college degree, while 44.5% were college graduates or had some postgraduate study. We report the extent to which expectations varied with patient sex, age (median split, 18-47 and 48-88 years), race (African American or white), and educational level (less than a college degree or at least a college degree).

Table 1. Characteristics of the Survey and Video Samples*

Characteristic	Survey Sample (n = 415)	Video Sample (n = 123)
Age, mean (SD), y	47.5 (16.3)	39.7 (15.7)
Female sex	263 (63.4)	74 (60.2)
Educational level		
<High school degree	26 (6.3)	6 (4.9)
High school graduate	82 (19.8)	13 (10.6)
Some college	120 (28.9)	27 (22.0)
College graduate	108 (26.0)	40 (32.5)
Any postgraduate study	75 (18.1)	34 (27.6)
Not reported	4 (1.0)	3 (2.4)
Race/ethnicity		
African American	40 (9.6)	15 (12.2)
Asian	7 (1.7)	3 (2.4)
White	315 (75.9)	99 (80.5)
Hispanic or Latino	26 (6.3)	3 (2.4)
Other	27 (6.5)	3 (2.4)

*Data are given as number (percentage) of each group unless otherwise indicated. Percentages may not total 100 because of rounding.

While the video sample was drawn from only 2 regions of the United States, demographics roughly paralleled the national survey sample in terms of patient sex and self-reported race/ethnicity (Table 1). More specifically, 60.2% of patients in the video sample were female, and the 2 most frequently reported race/ethnicity categories were non-Hispanic white or Caucasian and non-Hispanic black or African American. While the age range was nearly identical (16-86 years), patients in the video sample tended to be younger and reported a higher level of education (38.3% had less than a college degree and 61.6% had a college degree or some postgraduate study [percentages do not total 100 because of rounding]). Approximately two thirds (68.4%) of physicians in the video sample were male; all but 1 were white.

SHAKING HANDS

Most patients reported that they want the physician to shake their hand during the greeting, while 18.1% do not (**Table 2**). Older patients were less likely than younger patients to want a physician to shake their hand (adjusted probabilities, 73.8% vs 86.8%; χ^2=8.47, $P<.005$). Otherwise, this pattern was consistent for males and females, for African American and white patients, and across educational level. Videotapes revealed that physicians and patients shook hands in 82.9% of visits. There were no

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Table 2. Greeting Behavior: Survey Responses and Video Observations*

Behavior	Survey (Preferred) Responses (n = 415)	Video (Actual) Observations (n = 123)
Shake hands		
Yes	78.1	82.9
No	18.1	17.1
Don't know	3.9	0
Patient names		
First (eg, "Jane")	50.4	13.8
Last (eg, "Ms Smith")	17.3	32.5
Both (eg, "Jane Smith")	23.6	3.3
Don't know	8.7	0
Not mentioned by physician	0	50.4†
Physician names		
First (eg, "Bob")	7.2	0
Last (eg, "Dr Franklin")	32.5	30.1
Both (eg, "Bob Franklin")	56.4	58.5
Don't know	3.9	0
Not mentioned by physician	0	11.4

*Data are given as percentage of each group.
†In 14 encounters (11.4%), the patient introduced himself or herself; the patient's name was not mentioned at all in 48 (39.0%) of these encounters.

statistically significant differences regarding hand shaking across patient age ($P = .70$), sex ($P = .81$), race/ethnicity ($P = .07$), or educational level ($P = .31$) in the video sample. There were significant individual differences between physicians: 9 of the 19 physicians shook hands with every patient, while the other 10 did so with an average of 64.1% of their patients (SD, 23.9%; range, 20%-94%; $F_{18} = 4.26$, $P < .001$).

PATIENT NAMES

Table 2 indicates that slightly more than half of respondents want their first name to be used when physicians greet them; 17.3% want their last name to be used (eg, Ms Smith), and 23.6% prefer that their first and last names be used (eg, Jane Smith). More African American than white patients prefer to be addressed by their last name (adjusted probabilities, 38.7% vs 13.1%; $\chi^2 = 9.76$, $P = .005$). No other demographic differences emerged in our analysis of the survey data for this variable.

Physicians did not mention patient names at all in 62 (50.4%) of the videotaped encounters (Table 2). The patient introduced himself or herself in 14 of these encounters, generally in response to the physician's introduction. For example:

Physician: Hi, I'm Bob Franklin [while shaking hands].
Patient: Nice to meet you. I'm Jane Smith.

In 48 encounters (39.0%), the patient's name was never mentioned by either the physician or the patient during the visit. When physicians did use a patient's name, they tended to use the last name. There was only 1 instance in which a physician asked how the patient wanted to be addressed, and it seemed to stem from confusion over several names in the chart:

Physician: You have a lot of names here [looking at chart]. What should I call you?
Patient: Dora is my first name.
Physician: What can I do for you?

There were no statistically significant differences regarding use of patient names across patient age ($P = .66$), sex ($P = .89$), race/ethnicity ($P = .75$), or educational level ($P = .71$) in the video sample. Of the 19 physicians, 3 never mentioned their patients' name, 3 always did, and the remaining 13 mentioned patient names in 52.0% (SD, 22.4%; range, 19%-86%) of encounters ($F_{18} = 5.50$, $P < .001$).

PHYSICIAN NAMES

Table 2 illustrates that most patients want physicians to use their first and last names during the initial greeting (eg, "Hello, I'm Bob Franklin."); 32.5% expect physicians to use their last name, and 7.2% would like physicians to use their first name only. While this pattern did not shift with age or educational level, differences emerged with respect to sex and race. More females than males expressed a preference for hearing the physician's first and last names (adjusted probabilities, 66.3% vs 49.6%; $\chi^2 = 8.04$, $P = .005$). In addition, more African American than white patients reported preferring that physicians use both first and last names when introducing themselves (adjusted probabilities, 78.3% vs 58.0%; $\chi^2 = 5.96$, $P = .05$).

As shown in Table 2, physicians used both their first and last names when introducing themselves to patients in most of the videotaped encounters (eg, "Hi, I'm Bob Franklin."). These physicians did not add the title of "Dr" when introducing themselves in this manner. Physicians used their last name (eg, "Dr Franklin") during introductions in 30.1% of the encounters. They did not introduce themselves at all in 14 visits (11.4%). There were no statistically significant differences regarding use of physician names across patient age ($P = .19$), sex ($P = .26$), race/ethnicity ($P = .87$), or educational level ($P = .19$) in the video sample. Of the 19 physicians, 12 introduced themselves at every visit. On average, the other 7 physicians mentioned their name in 68.6% of visits (SD, 14.2%; range, 50%-93%; $F_{18} = 2.55$, $P < .005$).

OTHER CONSIDERATIONS

Fewer than half (42.6%) of the survey respondents answered the open-ended question regarding other expectations for greetings. The most common responses from this subsample of 177 respondents were as follows: smile (23.2%); be friendly, personable, polite, respectful (19.2%); be attentive and calm, make the patient feel like a priority (16.4%); and make eye contact (13.0%).

COMMENT

While greetings may seem a rather mundane aspect of physician-patient communication, attention to this task can set a positive tone for the encounter and increase the chances of developing a therapeutic clinical relationship.[12,13] This study provides a focused evidence-based perspective on behavior during greetings. Although the

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telephone survey was a national random sample across 48 states, the sample of respondents was more highly educated than the population in general.[14] However, the pattern of results did not vary significantly with education. In addition, our sample of videotaped encounters was small and drawn from 2 academic primary care practices. While these practices are situated in 2 different regions of the United States, both serve a relatively highly educated patient population. Accordingly, the video analysis is intended to be illustrative: beyond documenting that physician styles differ significantly, it may not represent everyday practice in all clinical settings.

Results obtained from the national survey sample suggest that physicians and medical students in the United States should be encouraged to shake hands with patients. That said, our finding that older patients were somewhat less likely to express a preference for shaking hands reinforces the importance of being sensitive to nonverbal cues that might indicate whether patients are open to this behavior. Of course, physicians should maintain safety and hygiene by washing their hands.[15] Given the diversity of opinion regarding the use of names, coupled with national patient safety recommendations concerning patient identification,[16,17] we suggest that physicians initially use patients' first and last names. The data indicate that African-American patients may prefer a more formal type of address (eg, Ms Smith) in subsequent encounters. Finally, survey responses reinforce the importance of physicians introducing themselves using their first and last names. For instance, if Dr Robert Franklin is meeting Ms Jane Smith, we would suggest that he say: "Jane Smith? Hi, I'm Bob Franklin." Adopting this strategy of using parallel identity terms communicates respect and reciprocity.[3,4,9] Moreover, our sample of videotaped primary care encounters indicates this was a comfortable form of introduction for most of the study physicians.

Textbooks that address greetings provide a range of recommendations regarding how patients should be addressed, sometimes suggesting that physicians ask for patients' preference.[1,7] While asking patients how they would like to be addressed is an attractive and egalitarian strategy in the abstract, physicians may find it somewhat awkward in practice when meeting a patient for the first time. Indeed, this approach was evident in only 1 of the 123 videotaped encounters we studied, and seemed to be a result of confusion over different names in the chart rather than courtesy. When physicians ask how patients want to be addressed at the beginning of their encounter, patients may feel pressure to answer that the more familiar form of address is acceptable before rapport has been established. For some, this may increase a sense of familiarity; for others, it can exacerbate a sense of power imbalance, especially if physicians refer to themselves with formal titles (eg, Dr Jones).[4] The strategy of using parallel identity terms (ie, first and last names for patient and physician) in the initial greeting obviates this issue, and potential problems that may stem from assuming how a patient should be addressed. We recommend asking about patients' preferred form of address at the point of using their name a second time—whether later in the same encounter or in a subsequent visit—and noting this preference in the record.

Our survey did not ask directly whether patients want physicians to explain their role (eg, resident or specialist), but we consider this an essential component of the introduction, particularly within contexts in which providers (eg, physicians or medical students) may be at different levels of training or have different responsibilities within a medical team (eg, "Dora Walker? Hi, I'm Dave Gordon, a medical student working with Dr Franklin."). This point echoes recommendations outlined by others who have specifically addressed greetings.[1-9] In addition, the survey questions focused on initial greetings. On return visits, we suggest that previous meetings be acknowledged during the greeting (eg, "Hello, Ms Smith; good to see you again." or "I don't know if you remember me from last time; I'm Janet Jones, a resident working with Dr Franklin."). Greetings in return visits can convey a great deal about how much a physician remembers or cares about a patient. Over time, the type and tenor of greeting will vary depending on the context of care and depth of the physician-patient relationship.

Texts, articles, and courses on medical interviewing vary in their attention to the task of greeting patients appropriately. Based on our review, few published studies address greetings and many texts ignore greetings altogether, focusing instead on problem elicitation as the first interviewing task. This may give the impression that greetings are either intuitive or unimportant. Our observation that there was no mention of the patient's name in more than a third of videotaped first-time encounters reinforces the notion that greetings may be overlooked in actual practice.[1,2,8,9] Because greetings are one way to ensure proper identification of patients, they might well be considered a fundamental component of patient safety.[16,17] In terms of physician identification, Silverman and colleagues[1(p39)] note that "Patients frequently complain that the doctor did not introduce himself, that they were not sure who they were seeing or what his role was within the team." In sum, greetings create a first impression that may extend far beyond what is conventionally seen as "bedside manner."

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