Appraising the Practice of Etiquette-Based Medicine in the Inpatient Setting

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BACKGROUND: The physician–patient relationship is at the heart of patient care. Dr. Michael Kahn proposed a checklist of six behaviors, defining “etiquette-based medicine”, as a strategy to start each encounter respectfully and improve patient–physician rapport.

OBJECTIVE: To assess performance of “etiquette-based medicine” in the inpatient setting.

DESIGN, SETTING, AND PARTICIPANTS: Cross-sectional observational study using time-motion techniques between May and July, 2009. Eight hospitalists were randomly selected at each of three hospitals in the Greater Baltimore area. Each time the physician entered a patient’s room, a single observer recorded whether the “etiquette-based medicine” behaviors were performed: (1) knocking or asking to enter the patient’s room, (2) introducing oneself, (3) shaking the patient’s hand, (4) sitting down in the patient’s room, (5) explaining one’s role in the patient’s care, and (6) asking about the patient’s feelings regarding his or her hospitalization or illness.

MEASUREMENTS: The frequency with which physicians performed the six behaviors, predictors of behavior performance, and Press-Ganey performance scores. The etiquette-based medicine (EtBM) score was defined and calculated by dividing the number of observed behaviors by the number expected.

RESULTS: The 24 observed hospitalists collectively saw 226 unique patients. No individual behavior was performed with a majority of patients, and, with 30 % of the patients, none of the behaviors were performed. The average EtBM score for the physicians was 22.3 % (SD 10.9 %). Physicians who spent more time with patients were more likely to perform behaviors. Sitting down ($p=0.026$) and EtBM scores ($p=0.019$) were associated with physician-specific Press-Ganey ratings.

LIMITATIONS: Cross-sectional design does not allow for determination of causality.

CONCLUSIONS: “Etiquette-based medicine” was infrequently practiced by this sample of hospitalist physicians. Improving performance of etiquette-based medicine may improve patient satisfaction.

KEY WORDS: etiquette-based medicine; professionalism; hospitalists.

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INTRODUCTION

When a person is admitted to a hospital, he or she must wear a gown, sleep in an unfamiliar bed, and take on the identity of the “patient”. Physicians, as leaders of the healthcare team, have a professional and moral obligation¹ to ensure that patients feel welcome and comfortable in their new surroundings. It is disquieting, yet unsurprising, that the majority of inpatients cannot identify the names or even the roles of the physicians who are caring for them.^{2–4} Pressure is mounting from the public and payers for physicians to provide more patient-centered care,⁵ which has been shown to improve the patient experience and clinical outcomes.^{6–8} Patient satisfaction with providers is being publicly reported⁹ and beginning in fiscal year 2013, a fraction of Medicare reimbursement for many hospitals may be influenced by patient satisfaction and service.¹⁰

Kahn suggested that the practice of “etiquette-based medicine”—simply treating the patient courteously—may lay the groundwork for therapeutic physician–patient relationships.¹¹ He outlined six behaviors to be performed at the beginning of a patient encounter that could be transformed into a checklist to promote physician etiquette. We conducted this study to assess the current practice of etiquette-based medicine in the hospital setting.

METHODS

Design

This was an observational study of hospitalist physicians using time-motion techniques between May and July, 2009, at three institutions in the Greater Baltimore area.

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Setting and Subjects

Two hospitals were academic medical centers, and the third was a community hospital. All three hospitals provided 24-7 hospitalist coverage, and the observed hospitalists worked on non-housestaff services.

All hospitalists from the three institutions were invited to participate in the study by email. All but one hospitalist was agreeable to being observed. Among those willing to participate and scheduled to work a daytime non-admitting shift during the study period, eight physicians from each hospital were randomly selected using a web-based randomization program. Each hospitalist signed a written consent form to be part of a research study to understand how their time was being spent.

Data Collection

The same observer shadowed 24 hospitalists during one entire daytime shift on a non-admitting day. Each time the physician entered a patient's room, the observer recorded whether the physician performed the six behaviors of etiquette-based medicine: (1) knocking on the door or asking to enter the patient's room, (2) introducing himself or herself by stating his or her name for the patient, (3) shaking hands with the patient, (4) sitting down at any time when in the patient's room, (5) explaining his or her role in the healthcare team, and (6) asking about the patient's feelings regarding the hospitalization or the patient's illness.

Hospitalists were aware that they were being observed as part of a time-motion study, but were not aware that specific behaviors were being recorded. Patients were also not aware that these behaviors were being recorded; if they asked why the observer was present, they were told it was for a study to observe how physicians spend their time.

The number of minutes physicians spent on each patient encounter and the total amount of time in "direct patient care" (i.e. time spent with patients or their families) was recorded by the observer. Physician demographic information and characteristics of the workday were collected from each physician on the day of their shift.

Physician-specific Press-Ganey survey data were gathered from the hospital's data set for all patients discharged from July 1, 2008 through December 31, 2010 for 23 of the 24 physicians. These physicians had an average of 80.1 surveys attributed to them over this time period. The patients that were seen on the observed shift were not specifically surveyed as part of this study. Press-Ganey is the most experienced and widely used vendor of patient satisfaction surveys and counts 50 % of U.S. hospitals among its clients.¹² It draws patient samples electronically from a census of patients provided by client hospitals and then mails surveys directly to patients' homes within 1 week of discharge.¹³

After data collection, data was de-identified so that all researchers were blinded to the identities of the physician participants. The study was approved by an institutional review board at the Johns Hopkins University School of Medicine.

Measures

Etiquette-Based Medicine (EtBM) Behaviors. Each behavior was recorded for each patient on the first encounter of the day. A physician-specific EtBM score was defined as the frequency of performance of all behaviors. Counts for each behavior and total EtBM score were converted into percentages. Physician-level EtBM measures were positively skewed, but skew and kurtosis measures fell within acceptable limits.

Physician Demographic and Workday Characteristics.

Physician characteristics were treated as covariates and included age, gender, the number of years as a hospitalist, and whether the hospitalist had administrative or leadership responsibilities. Five workday variables were treated as independent variables and measured: (1) whether the setting was a community or academic hospital, (2) the number of patients seen that day, (3) the number of patients new to the physician, (4) average number of minutes each physician spent with patients during the shift, and (5) the amount of time spent with each patient at the first encounter of the day. Skewness and kurtosis for all continuously measured covariates fell within acceptable limits.

Press-Ganey Patient Satisfaction Items. Press-Ganey calculates a composite physician rating which is the average of responses to five questions for which patients rate satisfaction with providers using a 5-item Likert scale in the following areas: (1) concern for their questions/worries, (2) friendliness/courtesy, (3) skill, (4) ability to keep the patient informed, and (5) time spent with the patient. Press-Ganey converts all responses to a 0 to 100 point scale when reporting the data.¹³

Data Analysis

Summary and descriptive statistics were used to characterize the physician population and aspects of their observed shifts. We computed the frequency with which the physicians performed each of the six EtBM behaviors during the first encounter of the day with every patient, and with the subset of patients whom the physician had not met before (patients who were "new" to the providers).

Bivariate analyses were performed to assess associations between physician or workday characteristics with each of the EtBM behaviors and the EtBM score. Independent physician characteristic predictor variables were dichotomized at the physician group median for continuous

variables. Disaggregated data was analyzed when both the independent and dependent variables were measured at the physician encounter level. For all other analyses, data was aggregated at the physician level. T-tests and chi-square tests determined significance, at $p < 0.05$.

To examine the relative contribution of physician characteristics and each workday characteristic on observed EtBM behaviors, we conducted a series of multiple linear regression equations predicting each of the seven outcome measures (i.e. EtBM score and each EtBM behavior). To avoid multicollinearity and inclusion of too many predictors, each model included the four physician demographic characteristics, as covariates, along with one of the four physician-level workday characteristics, as an independent variable. Each model estimated the contribution of the workday variable over and above the influence of physician demographic control variables. Aggregate physician-level percentages were used as outcome variables for multivariable regression modeling; therefore outcomes were measured on a continuous scale, and all multivariable models used individual physicians as the unit of analysis. For ease of interpretation, we centered all continuous variables prior to regression analysis¹⁴ and reported unstandardized beta coefficients.¹⁵ Regression analyses were performed using SPSS v20.

On an exploratory basis, we investigated construct validity based on the expectation that physicians with higher frequencies of EtBM behaviors would receive higher patient satisfaction ratings by their patients. We computed Pearson correlations for each of the EtBM outcomes versus each physician's composite Press-Ganey score.

RESULTS

Twelve of the 24 physicians in this study were female, and participants had a mean age of 35.3 years (Table 1). Five physicians reported having administrative duties. While 12 physicians reported some educational role, none had education activities that accounted for more than 10 % of their effort.

Table 1. Individual and Work-Related Characteristics for the 24 Hospitalist Physicians that Were Observed During a Daylong Inpatient Shift

Characteristic	Number (%) or Mean (SD)
Female gender, n (%)	12 (50)
Age in years, mean (SD)	35.3 (3.9)
Years as a hospitalist, mean (SD)	3.8 (3.2)
Physicians with an administrative role, n (%)	5 (21)
Patients per shift, mean (SD)	9.4 (3.2)
Patients new to the physician, mean (SD)	3.8 (2.8)
Encounters per shift, mean (SD)	16.2 (4.4)
Length of shift in hours, mean (SD)	9.9 (1.9)
Time during shift spent with patients in hours, mean (SD)	1.8 (0.5)
Time spent with each patient on first encounter in minutes, (mean, SD)	8.2 (3.0)

During their observed shifts, the physicians collectively saw 226 unique patients, including 89 patients whom they had not seen on the previous day or at an earlier time during the incident hospitalization. They had 389 patient encounters, and each patient was seen a mean of 1.7 times. Physicians cared for an average of 9.4 patients during a shift, 3.8 of whom they had not met on the previous day.

The average length of the shift was 9.9 h (SD=1.9). Overall, 18 % of hospitalists' time was spent in direct patient care and 60 % in indirect patient care (mostly on documentation).

The average composite Press-Ganey scores for the physician sample was 82.9 (78.4–88.1, SD=2.5), and over the same time period for the average for hospitals in the state of Maryland was 85.2.

Performance of Etiquette-Based Medicine Behaviors

Of the six measured behaviors, not one of the behaviors was performed with a majority of patients, and physicians performed none of the six behaviors with almost a third of patients (30 %) (Fig. 1). Physicians introduced themselves to most patients, but did not introduce themselves to more than a fifth of new patients (22 %), and did not explain their roles to a majority of new patients (56 %). Of the six behaviors, physicians were least likely to inquire about the patients' feelings about the hospitalization or illness, doing so with nine of the 226 patients (4.0 %), and six of the 89 new patients (6.9 %).

EtBM scores for the 24 physicians ranged from 3.7 % to 46.7 %, with a mean of 22.3 % (SD 10.9 %).

Unadjusted Associations Between Physician Variables, Work Factors, and Etiquette-Based Medicine Behaviors

If physicians were meeting the patient for the first time, physicians were far more likely to introduce themselves (78 % vs. 10 %, $p < 0.001$) and explain their role in caring

Figure 1. Frequency of performance of etiquette-based medicine behaviors by 24 hospitalists for 226 patients, 89 of which were new patients, on the first encounter of the day.

for the patient (44 % vs. 2 %, $p<0.001$), and physicians who saw more new patients had significantly higher EtBM scores (29 % vs. 18 %, $p=0.010$) (Table 2). When a physician spent more time with the patient on the first encounter, it was significantly more likely that five of the six EtBM behaviors would be performed. Likewise, spending a greater proportion of the shift with patients was associated with two behaviors and the EtBM score. Physician gender, administrative role, hospital setting, and total number of patients seen on the shift were each associated with one to two of the individual behaviors, but not EtBM score. Age and years of experience as a hospitalist were not associated with any EtBM behavior.

Multiple Regression Models of the Relation of Physician Variables and Work Factors to Etiquette-Based Medicine Behaviors

Control variables (gender, age, years of experience as a hospitalist, and administrative duties), accounted for 22 % of the variance for EtBM score, 28 % for asking to enter, 34 % for introducing oneself, 6 % for explaining one's role, 27 % for shaking hands, 50 % for sitting down, and 5 % for asking patients about the patients' feelings (Table 3).

None of the independent variables were associated with EtBM score, although several aspects of the work day were associated with specific EtBM behaviors. Each additional

patient seen was associated with a decrease in sitting down by 2.3 % of encounters, and an increase in asking to enter by 5 %. For each additional new patient, the rate of introducing oneself increased by 5.6 % and the rate of explaining one's role increased by 2.8 %. Each additional minute above the average number of minutes spent with patients was associated with an increase in frequency of shaking hands of 2.4 %.

Correlations Between Press-Ganey Data and Etiquette-Based Medicine

EtBM score was significantly associated with the Press-Ganey overall composite rating of the physician ($r=0.49$, $p=0.019$). The only specific EtBM behavior that was associated with the Press-Ganey composite rating of the physician was sitting down ($r=0.46$, $p=0.026$). Significant associations were not found for asking to enter ($r=0.12$, $p=0.59$), introducing oneself ($r=0.26$, $p=0.23$), explaining one's role ($r=0.30$, $p=0.16$), shaking hands ($r=0.24$, $p=0.28$), or asking about the patients' feelings regarding the hospitalization or their illness ($r=0.25$, $p=0.26$).

DISCUSSION

In this assessment of physician etiquette, we found that physicians infrequently performed all the behaviors of

Table 2. Frequency of Performance Expressed as a Percentage of Each Etiquette-Based Medicine (EtBM) Behavior at 226 First Encounters of the Day with Each Patient as a Function of Hospitalist Demographic and Patient Variables

Characteristics	Asks to enter	Introduces self	Explains role	Shakes hand	Sits down	Asks feelings	EtBM score
Physician sex							
Male	26	32	18	29*	15	6	21
Female	47	44	18	11	23	3	24
Physician age							
> 35 years	25	45	18	26	22	6	24
≤ 35 years	47	32	18	15	17	4	22
Experience as a hospitalist							
> 3.8 years	26	49	17	23	23	7	24
≤ 3.8 years	43	31	19	18	17	3	22
Administrative duties							
Yes	29	62*	18	24	46*	7	31
No	39	32	18	19	12	3	21
Hospital type							
Community	70***	36	23	12	6**	4	25
Academic	20	39	18	24	25	5	22
Total number of patients							
> 8	55*	39	18	12	10*	3	23
≤ 8	21	37	18	27	27	6	23
Patient seen on previous day							
No	42	78***	44***	26*	24*	6	29*
Yes	42	10	2	13	11	2	18
Portion of shift with patients							
> 18 %	40	51**	25*	23	18	7	27*
≤ 18 %	33	25	11	17	20	2	18
Time on first encounter							
≥ 7 min	46	53**	27**	23*	23*	7*	27*
< 7 min	38	19	9	12	9	1	18

Bolded values are significant at $p<0.05$. Chi-square and t-tests determined significance of associations

*indicates $p<0.05$

**indicates $p<0.01$

***indicates $p<0.001$

Table 3. Unstandardized Beta Coefficients from Multiple Regression Models Regressing each Etiquette-Based Medicine (EtBM) Outcome Variable on Workday Characteristic Independent Variables While Adjusting for Physician Characteristics

	Asks to enter	Introduces self	Explains role	Shakes hand	Sits down	Asks feelings	EtBM score
Community vs. academic hospital	-49.6 (10.7)	-0.5 (10.7)	-6.4 (8.0)	13.8 (9.9)	17.3 (7.1)	-0.6 (2.8)	-4.1 (5.4)
Total number of patients	5.1 (2.0)	-0.5 (1.6)	0.1 (1.2)	-2.3 (1.4)	-2.3 (1.1)	0.2 (0.4)	-0.1 (0.8)
Number of new patients	3.5 (2.7)	5.6 (1.3)	2.8 (1.3)	-0.3 (1.8)	-1.9 (1.4)	0.5 (0.5)	1.6 (0.9)
Time spent with patients	-2.3 (1.6)	1.9 (1.0)	1.0 (0.8)	2.4 (0.1)	1.5 (0.8)	0.1 (0.4)	0.9 (0.5)

Values in parentheses are standard error. Bolded values are significant at $p < 0.05$. All regression models control for individual differences in physician gender, age, years of experience as a hospitalist, and administrative duties

etiquette-based medicine (EtBM), that physicians were more likely to perform the behaviors for new patients, and that EtBM performance was associated with Press-Ganey patient survey ratings. Our findings provide insight into how providers might offer greater courtesy, which in turn may result in an enhanced patient experience.

While this is the first study to assess all six behaviors of etiquette-based medicine, the performance of certain individual behaviors has been reported in other studies. For example, our sample of hospitalists introduced themselves to new patients (78 %) somewhat less frequently than a sample of 19 primary care physicians observed over 123 encounters (89 %),¹⁶ but more often than a sample of seven emergency department physicians over 33 encounters (64 %).¹⁷ They also explained their role (44 %) more often than the same emergency department physicians (6 %).¹⁷ Previous studies have found that only 10–32 % of inpatients can correctly name their physicians,^{2–4} and fewer (11 %) can explain their physicians' role in the care that they are receiving.⁴ Interventions aiming to improve patients' abilities to recall the names of their physicians have yielded varying degrees of success.^{3,18,19} Our results show that hospitalists may be missing an opportunity to address this problem by reminding patients of their name and role. It is our belief that physicians, and other members of the healthcare team, should remind hospitalized patients of their names and their role in their care at least daily.

We found that spending more time with patients was correlated with increased performance of EtBM behaviors. Although some might infer that it takes longer to perform etiquette-based medicine, asking to enter the room, introducing oneself, stating one's role in healthcare, and shaking hands can likely be accomplished in several seconds. Others have corroborated that sitting down is not associated with longer encounters.^{20–22} In light of this information, it seems that the association between EtBM score and encounter length is likely due to factors that were unmeasured, rather than it taking longer to perform the EtBM behaviors.

This study is the first to report the association between simple, discrete physician behaviors and Press-Ganey ratings of providers. Press-Ganey is the most widely-used vendor for patient satisfaction surveys, and hospitals use this information to monitor provider performance and to provide feedback to individuals. While it is unknown if

providers were rated more favorably because they performed EtBM behaviors, encouraging providers and teaching trainees to improve their own EtBM scores may be helpful for augmenting patient satisfaction. Of the six behaviors, sitting down was significantly associated with Press-Ganey ratings. Patients prefer to have physicians sit down when talking to them,^{22,23} and patients perceive that physicians who sit spend more time with them.^{20,22}

It is unimaginable that any physician would consciously and purposively practice the opposite of etiquette-based medicine: entering a patient's room without warning, standing over the patient, not introducing oneself or one's role in the patient's care, and failing to show any interest in the patient's perspective. However, contemporary hospitals are complex and factors that include physical space, work flows, and demands imparted on physicians may conspire to make physicians forego these overt displays of courtesy. While there are undoubtedly many explanations for why the hospitalists in our study *did not* perform the behaviors of etiquette-based medicine for every patient, we are hard pressed to elaborate compelling arguments as to why they *should not* have performed them. The use of an EtBM checklist may enable physicians to routinize simple discrete behaviors that could start every physician-patient encounter in a respectful way.

Several limitations of this study should be considered. First, the generalizability of our results to other hospitalists and other types of physicians is not known, although the decision to observe 24 physicians working at three different hospitals for 10 h allowed us to witness a large number of patient encounters. Second, physicians were aware that they were being observed, which may have altered their behavior; albeit they were not aware EtBM behaviors were being recorded. Third, one observer shadowed all physicians and attempted to use the same criteria for recording all behaviors. It may have been preferable to have multiple observers and to assess interrater reliability. Fourth, some patient factors, such as a patient's ability to communicate or cultural preferences, may influence physician behavior; however, it seems likely that most patients would not object to the performance of EtBM behaviors. Fifth, environmental factors may influence some behaviors. For example, the doors to patient rooms were often closed at the community hospital, which may explain why its physicians asked permission to enter more consistently.

Similarly, there are not always places for physicians to sit in a patient's room. Sixth, some physicians may consciously elect not to shake hands with patients due to heightened attention for nosocomial infection. However, we saw that most of the physicians shook hands with some patients and not with others. Finally, the study design does not allow us to determine whether performing these six specific behaviors directly influences the patient-physician relationship or clinical outcomes.

Etiquette has been described as "the act that opens the social space"²⁴ and as an "essential moral quality for a physician".²⁵ Our study suggests that there may be an opportunity for physicians to improve their etiquette in inpatient settings. The opening of the clinical encounter has been largely neglected in the medical literature,¹⁶ and there is no consensus on how to initiate interactions with patients.²⁶ Kahn's etiquette-based medicine model, serving as a checklist of patient-centered behaviors, has the potential to start every patient encounter properly. Using such a checklist may allow healthcare providers to start every patient interaction with overt displays of respect and humanism.

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Conflict of Interest: The authors declare that they do not have a conflict of interest.

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REFERENCES

1. Inui TS. (Association of American Medical Colleges). Flag in the Wind: Educating for Professionalism in Medicine. 2003.
2. Arora V, Gangireddy S, Mehrotra A, Ginde R, Tormey M, Meltzer D. Ability of hospitalized patients to identify their in-hospital physicians. *Arch Intern Med*. 2009;169(2):199-201.
3. Maniaci MJ, Heckman MG, Dawson NL. Increasing a patient's ability to identify his or her attending physician using a patient room display. *Arch Intern Med*. 2010;170(12):1084-1085.
4. O'Leary KJ, Kulkarni N, Landler MP, et al. Hospitalized patients' understanding of their plan of care. *Mayo Clin Proc*. 2010;85(1):47-52.
5. Levinson W, Lesser CS, Epstein RM. Developing physician communication skills for patient-centered care. *Health Aff (Project Hope)*. 2010;29(7):1310-1318.
6. Auerbach S. The impact on patient health outcomes of interventions targeting the patient-physician relationship. *Patient*. 2009;2(2):77-84.
7. Griffin SJ, Kinmonth AL, Veltman MW, Gillard S, Grant J, Stewart M. Effect on health-related outcomes of interventions to alter the interaction between patients and practitioners: a systematic review of trials. *Ann Fam Med*. 2004;2(6):595-608.
8. Street RL Jr, Makoul G, Arora NK, Epstein RM. How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Educ Couns*. 2009;74(3):295-301.
9. U.S. Department of Health and Human Services. Medicare Hospital Compare Quality of Care. Available at <http://www.hospitalcompare.hhs.gov/> Last accessed on December 20, 2012.
10. Center for Medicare and Medicaid Services. Hospital Value Based Purchasing. Available at <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/hospital-value-based-purchasing/index.html?redirect=/hospital-value-based-purchasing>. Last accessed on December 20, 2012.
11. Kahn MW. Etiquette-based medicine. *N Engl J Med*. 2008;358(19):1988-1989.
12. Press Ganey. Creating High-Performance Healthcare Organizations. Available at <http://www.pressganey.com/aboutUs.aspx>. Last accessed on December 20, 2012.
13. Fulton BR, Dreves KE, Ayala LJ, Malott DL Jr. Patient satisfaction with hospitalists: facility-level analyses. *Am J Med Qual*. 2011;26(2):95-102.
14. Aiken LS, West SG. Multiple Regression: Testing and Interpreting Interactions. Thousand Oaks, CA: Sage Publications; 1991.
15. Cohen JC, West P, Aiken SG. Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. 3rd ed. Mahwah, NJ: Erlbaum; 2003.
16. Makoul G, Zick A, Green M. An evidence-based perspective on greetings in medical encounters. *Arch Intern Med*. 2007;167(11):1172-1176.
17. Santen SA, Rotter TS, Hemphill RR. Patients do not know the level of training of their doctors because doctors do not tell them. *J Gen Intern Med*. 2008;23(5):607-610.
18. Arora VM, Schaninger C, D'Arcy M, et al. Improving inpatients' identification of their doctors: use of FACE cards. *Jt Comm J Qual Patient Saf / Jt Comm Resour*. 2009;35(12):613-619.
19. Francis JJ, Pankratz VS, Huddleston JM. Patient satisfaction associated with correct identification of physician's photographs. *Mayo Clin Proc*. 2001;76(6):604-608.
20. Johnson RL, Sadosty AT, Weaver AL, Goyal DG. To sit or not to sit? *Ann Emerg Med*. 2008;51(2):188-193. 193 e1-2.
21. Radosh L, Keller B, Spicer J. Effects upon patient satisfaction during inpatient rounding of physician sitting vs. standing. Society of Teachers of Family Medicine Annual National Conference. Vancouver, Canada; 2010.
22. Strasser F, Palmer JL, Willey J, et al. Impact of physician sitting versus standing during inpatient oncology consultations: patients' preference and perception of compassion and duration. A randomized controlled trial. *J Pain Symptom Manag*. 2005;29(5):489-497.
23. Swayden KJ, Anderson KK, Connelly LM, Moran JS, McMahon JK, Arnold PM. Effect of sitting vs. standing on perception of provider time at bedside: a pilot study. *Patient Educ Couns*. 2012;86(2):166-71.
24. Day L, Benner P. Ethics, ethical comportment, and etiquette. *Am J Crit Care: Off Publ Am Assoc Crit Care Nurses*. 2002;11(1):76-79.
25. Maio G. Is etiquette relevant to medical ethics? Ethics and aesthetics in the works of John Gregory (1724-1773). *Med Health Care Philos*. 1999;2(2):181-187.
26. Rao JK, Anderson LA, Inui TS, Frankel RM. Communication interventions make a difference in conversations between physicians and patients: a systematic review of the evidence. *Med Care*. 2007;45(4):340-349.