Humanism at Heart: Preserving Empathy in Third-Year Medical Students

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Abstract

Purpose

Research suggests that medical student empathy erodes during undergraduate medical education. The authors evaluated the Jefferson Scale of Physician Empathy Medical Student Version (JSPE-MS) scores of two consecutive medical school classes to assess the impact of an educational intervention on the preservation of empathy.

Method

The authors conducted a before-and-after study of 209 Robert Wood Johnson Medical School (RWJMS) students enrolled in the classes of 2009 and 2010. Students' clerkships included a mandatory, longitudinal "Humanism and Professionalism" (H&P) component, which included blogging about clerkship experiences, debriefing after significant events, and discussing journal articles, fiction, and film. Students completed the JSPE-MS during their first and last clerkships.

Results

The results showed that (1) contrary to previous studies' findings, third-year students did not show significant decline in empathy as measured by the JSPE-MS (these students, from two consecutive RWJMS classes, experienced the H&P intervention), (2) students selected for the Gold Humanism Honor Society (GHHS) were significantly different from their peers in empathy scores as measured by JSPE-MS, and (3) knowledge of selection for the GHHS seems to positively influence students' JSPE-MS scores.

Conclusions

Maintaining empathy during the third year of medical school is possible through educational intervention. A curriculum that includes safe, protected time for third-year students to discuss their reactions to patient care situations during clerkships may have contributed to the preservation of empathy. Programs designed to validate humanism in medicine (such as the GHHS) may reverse the decline in empathy as measured by the JSPE-MS.

Prior studies have reported that, despite the importance of empathy in doctor/patient interactions, medical education leads to deterioration in empathy among medical students and residents.[1,2] Clinical and therapeutic advantages of empathetic patient care include improved doctor–patient communication,[3] increased patient satisfaction,[4,5] greater patient compliance,[4,6] decreased litigation,[7] increased physician job satisfaction,[8] and decreased physician burnout.[9]

In health care, empathy is defined as "a cognitive attribute that involves an understanding of the inner experiences and perspectives of the patient as a separate individual, combined with a capability to communicate this understanding to the patient"[10] and "act on that shared understanding in a helpful and therapeutic way."[11] A possible explanation for a decline in empathy during medical education may be found in seminal papers by Hafferty[12] and by Hafferty and Franks.[13] These describe a "hidden" or "informal curriculum" in medical school and a learning environment in which students adopt behaviors in an ad hoc and unstructured manner. In this environment, negative role models may exert a powerful formative influence.[14] Thus, Kenny and colleagues[15] describe the imperative for medical students to obtain positive "professional character formation" and to "develop safe spaces where negative role modeling can be reflected on and translated into an effective learning experience." More recently, medical educators have described moral distress, burnout, and depression in third- and fourth-year medical students.[16] Burnout has been associated in third-year students with "self-reported unprofessional conduct and less altruistic professional values."[17] Spiegel and Siegel[18] write of the need for medical students to understand the "chaotic and challenging circumstances of medical school" so that it does not "threaten their identity or progress in the medical profession," thus "ensur[ing] that they become the compassionate, effective physicians they envision."

Researchers have recently conducted many studies on student empathy and have generally found that empathy in medical students decreases toward the end of their undergraduate medical education experience.[1,2,19,20] These studies of empathy in medical students are of varying design (cross-sectional versus longitudinal), and they have employed varying instruments, including the Jefferson Scale of Physician Empathy Medical Student Version (JSPE-MS),[1] the Balanced Emotional Empathy Scale (BEES),[2] and Hogan's Empathy Scale (HES).[21] Diseker and Michielutte,[21] for example, observed decreased emotional empathy, measured by the HES, among medical students before and after clinical experiences. Newton and colleagues[2] conducted a longitudinal study of empathy, pooling data from four contiguous medical school classes, and observed a statistically significant decrease in empathy during the third year

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of medical school as measured by the BEES. Hojat and colleagues[20] conducted a longitudinal study of third-year medical students at Jefferson Medical College using the JSPE-MS and noted a statistically significant decline in empathy. In a subsequent report on 456 students across four years of medical school, they found no significant change in empathy during the first two years, but a significant decline in empathy at the end of the third year through graduation; however, 27% of the students in the study did *not* show this decline in empathy.[1] Finally, Chen and colleagues[22] conducted a cross-sectional study at Boston University School of Medicine, measuring empathy using the JSPE-MS for all four classes in 2006. They found significant differences in mean empathy scores when comparing data from the end of the second year to the end of the third year. However, a recent study questioned whether "reports of the decline of empathy during medical education are greatly exaggerated"; in particular, the alleged magnitude of the decline and the subjective nature of the assessment received criticism.[23]

Several authors have suggested that educational efforts to enhance humanism and incorporate it into the curriculum may help overcome the perceived decline in empathy during medical school.[24–26] Shapiro and colleagues,[27] measuring empathy with the Empathy Construct Rating Scale and the BEES, reported a significant increase in empathy in 22 first-year students exposed to an eight-hour (total) literature and medicine elective. Shapiro et al[28] reported the preservation of empathy in 26 third- and fourth-year students after a multidimensional humanities elective. Qualitative research by DasGupta and Charon[29] suggests a positive change in medical student empathy through reflective writing and the "personal illness narrative." However, limitations of these studies include heterogeneous measurement of empathy, small sample sizes, and variable timing of curricular interventions.

Innovative programs designed to enhance the importance of compassionate patient care, such as those developed by the Arnold P. Gold Foundation for Humanism in Medicine, may also work to preserve empathy.[30] Recently, the Gold Foundation created the Gold Humanism Honor Society (GHHS) to recognize students, residents, and physicians who are exemplars of humanism (defined as empathy, compassion, altruism, responsibility, and respect) in doctor/patient interactions. Third-year students select their peers for the GHHS through a well-validated process,[31] and membership entails a service requirement. Membership in the GHHS is distinct from membership in Alpha Omega Alpha (AOA), the national medical honor society for medical students, residents, physicians, and scientists in the United States and Canada.[32] Nomination for AOA requires class rank in the top quartile and leadership characteristics, whereas membership in the GHHS is based on peer nomination using a validated questionnaire.

In 2007, 10 Robert Wood Johnson Medical School (RWJMS) student, resident, and faculty GHHS members met with their RWJMS–GHHS faculty advisor (who was, at the time, also a dean of student affairs) to design an educational intervention to maintain empathy in third-year students. We believed, on the basis of student reports, that erosion of empathy was an issue in medical education, especially during the clinical years. Further, none of us had had formal opportunities to discuss the challenges of the clerkship years during our own years in undergraduate medical education. We hypothesized that a curricular intervention during third-year clerkships might be a way to attenuate the loss of empathy.

The purpose of our study was to evaluate JSPE-MS scores of two consecutive medical school classes in order to assess the impact of an empathy-preserving curricular innovation. In addition, we evaluated the relationship between the maintenance of empathy during the clerkship year and student demographic characteristics, including membership in the GHHS.

Method

Study design

We evaluated, using the JSPE-MS, 107 students in the RWJMS class of 2009 and 102 students in the RWJMS class of 2010 before they began their clinical clerkships. The JSPE-MS consists of 20 questions measured on a Likert-like scale of 1 to 7 (a higher score implies more empathy, and the maximum score is 140). Prior research has shown the instrument to be valid for use with physicians, medical students, and other health professionals.[1,33,34]

We administered the JSPE-MS to RWJMS medical students in a large-group setting and coded answer sheets with a unique identifier to maintain anonymity. At the conclusion of the third year, we readministered the JPSE-MS, using the identifier. Also at the end of the clerkship year, we administered two supplementary questionnaires to gather demographic information on each student and to assess student satisfaction with the intervention. Demographic information collected included gender, age, race, history of hospitalization, having close family members with illness, and membership in GHHS. Student satisfaction questions queried students about the effect of the intervention curriculum on their awareness of positive and negative role models, the preservation of their innate empathy, their awareness of the importance of empathy in patient care, their ability to cope with everyday stressors in their clerkships, and their ability to recognize burnout in themselves and others. We offered no incentives for completing the questionnaires.

During the six required third-year rotations (medicine, surgery, pediatrics, obstetrics–gynecology, family medicine, and psychiatry), students participated in interactive sessions as part of an intervention entitled "Humanism and Professionalism" (H&P). The clerkship directors agreed that we could dedicate one hour of didactic time per rotation for each of these H&P sessions. Two of us (S.R. and B.G.) divided the sessions between us and communicated regularly to ensure that we independently delivered the same curriculum. All students on each rotation (approximately 15) attended their clerkship-specific session (see Table 1 for a comparison of curricular details in the 2009 and 2010 cohorts). During each session, we allotted time for students to debrief about the emotionally intense events they experienced and to share observations about positive and negative role models. During the first clerkship, students suggested that they would like to post reflective comments via anonymous blogs on our password-protected WebCT system (Blackboard, Inc., Washington, DC). WebCT is an online educational software

Table 1

Humanism and Professionalism (H&P) Curriculum Components for the Robert Wood Johnson Medical School (RWJMS) Classes of 2009 and 2010

H&P content	Facilitated small-group H&P sessions	Discussion of trigger articles	Blogging and discussion of student blogs	Longitudinal patient-centered medicine course	Evening film viewing and panel discussion	Appreciative inquiry exercise	Student satisfaction ratings
RWJMS 2009	✓	✓	✓		✓	✓	Midyear and end of year
RWJMS 2010	✓	✓	✓	✓			End of year

system that is sold to colleges and other institutions for electronic learning.[35] Blogging soon became an H&P requirement; we asked each student to post one entry per clerkship, and students were on their honor to comply. During H&P sessions, we used the blog posts as triggers for discussions on students' reactions to their clerkship experiences. In addition, one of us (S.R.) culled reflective journal articles from the *New England Journal of Medicine*'s Perspectives column,[36,37] from the *Annals of Internal Medicine*'s "On Being a Doctor" column,[38] from *Academic Medicine*,[39] from the American Medical Association's *Virtual Mentor*,[40,41] and from *The New York Times*[42,43] to discuss at the sessions. The facilitators explicitly told students that the main purpose of the H&P sessions was to maintain their innate humanism and professionalism. We provided consistent reinforcement of this objective through discussions of positive and negative role models, patient care experiences, morally distressing events, and students' reactions to all of these.

At midyear, many of the RWJMS class of 2009 students reported burnout; thus, we involved all students in an "appreciative inquiry" exercise to discuss positive aspects of their clerkship experience. Appreciative inquiry is a process whereby individuals in an organization ask questions that strengthen and highlight the positive potential of a system.[44,45] We held two required large-group (about 50 students) evening exercises for the class of 2009 to discuss "health care as a human right." During these events, students viewed films and heard panel discussions concerning health care in the United States and abroad. We asked for feedback from students in January and at the end of the third year (RWJMS class of 2009), or only at year's end (RWJMS class of 2010), about their satisfaction with the H&P curriculum and their perceptions of its effects on their professional development (Table 1).

The RWJMS curriculum was evolving, and students in the class of 2010 were the first to be enrolled in a new, four-year, "Patient-Centered Medicine" (PCM) course (Table 1). This course involves a significant time commitment, including early clinical experience, seminars with mentors, large-group discussions, and a longitudinal clinical experience. During their first and second years of medical school, the class of 2010 experienced 80 contact hours in PCM I and PCM II. The H&P curriculum was integrated into their PCM III course. Although the H&P clerkship sessions remained the same for the class of 2010, a requirement of 24 hours (12 seminar hours and 12 longitudinal clinical hours) replaced the two evening sessions experienced by the class of 2009 (Table 1).

Statistical analysis

Because of the introduction of the PCM course for the class of 2010, we analyzed JSPE-MS scores separately for the two classes. We compared the change in JSPE-MS scores for each class after completion of all six required rotations using paired *t* tests (MS Excel, Data Analysis Module, 2007, Redmond, Wash). We set the α level for significance at $P < .05$. We excluded one extreme outlier in the class of 2010 whose scores were greater than two standard deviations below the mean. The RWJMS institutional review board approved this study.

Results

We detected no significant decreases in empathy scores at the end of the third-year clerkships for either the RWJMS class of 2009 (mean JSPE = 115.4 versus 113.9, $P = .14$) or the RWJMS class of 2010 (mean JSPE = 112.4 versus 110.5, $P = .07$; Table 2). When we compared the pretest empathy scores of the class of 2009 with the pretest empathy scores of the class of 2010, we detected no statistically significant differences (class of 2009 = 115.1,

Table 2

Overall Jefferson Scale of Physician Empathy Medical Student Version (JSPE-MS) Scores, Robert Wood Johnson Medical School Class of 2009 and 2010

Group	Number	Mean preintervention JSPE-MS score (standard deviation)	Mean postintervention JSPE-MS score (standard deviation)	*P* value*	Difference in mean
Class of 2009	89	115.4 (10.4)	113.9 (10.4)	.14	−1.5
Class of 2010	73	112.4 (12.3)	110.5 (12.9)	.07	−1.9
Class of 2010†	73	112.4 (12.3)	112.1 (11.2)	.40	−0.3

* Class of 2009 *P* value is presented as two-tailed; 2010 *P* values are one-tailed.
† Analysis with post–Gold Humanism Honor Society (GHHS) disclosure scores among GHHS students (n = 14).

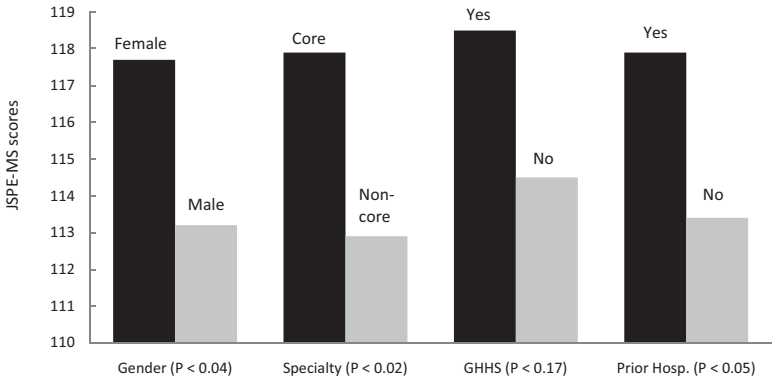

Figure 1 Robert Wood Johnson Medical School class of 2009 preintervention Jefferson Scale of Physician Empathy Medical Student Version scores by demographics.

class of 2010 = 112.4, $P < .10$; Table 2). Figures 1 through 3 and Tables 3 and 4 present the analyses of and relationships between (1) the change in empathy scores and (2) demographics, both before and after the intervention for each class.

Overall, feedback from students' self-reported perceptions of the H&P initiative showed that they were satisfied with the curriculum. Students in both classes commented that it helped them identify positive and negative role models and prevent burnout.

RWJMS class of 2009

Change in empathy scores. We received both pretest and posttest data from a total of 89 (83% of 107) students (43 female, 46 male). Mean change in pretest/posttest empathy score was not significant for the group as a whole (pre = 115.4, post = 113.9, $P = .135$; Table 2). These scores approximated pretest scores reported in previous studies, but our sample did not decline as sharply, or significantly.[1,10]

Demographic analysis. We found no statistically significant change between pretest and posttest empathy scores when analyzing data by gender, intended specialty choice, age, career prior to entering medical school, experience of illness/death of a close friend and/or family member, or prior hospitalization (Table 3). When analyzing pretest scores by demographic characteristics, female students, students entering core specialties (internal medicine, pediatrics, family medicine, obstetrics–gynecology, and psychiatry), and those with prior hospitalization had significantly higher empathy scores compared with male students, students entering noncore (all other) specialties, and those not previously hospitalized (Figure 1). Female students, those entering core specialties, and those previously hospitalized continued to have higher posttest empathy scores when compared, respectively, with male students, students entering noncore specialties, and students who had not been hospitalized previously (Figure 2 [top]).

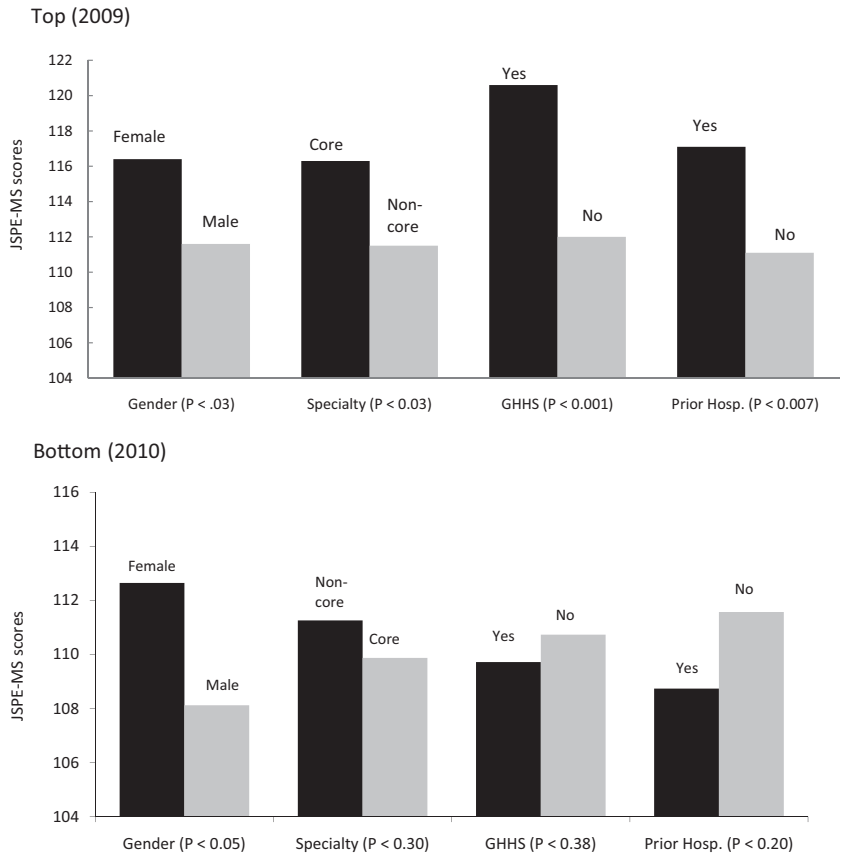

Figure 2 Robert Wood Johnson Medical School (RWJMS) class of 2009 (top) and RWJMS class of 2010 (bottom): Postintervention Jefferson Scale of Physician Empathy Medical Student Version scores by demographics.

Subgroup analysis for GHHS. Subgroup analysis showed that JSPE-MS scores of students selected for GHHS (n = 15) showed significant differences from their classmates' scores. Although their pretest scores did not differ significantly from the class as a whole before the intervention (Figure 1), GHHS students had posttest empathy scores significantly higher than the other students in the class (n = 67) who were not elected to the GHHS (120.6 versus 112.0, $P < .00022$; Table 3). In addition, those students who were not GHHS members had significant declines in empathy between the pretest and posttest (114.5 versus 112.0, $P < .02$), whereas GHHS members' scores did not change, even increasing, albeit not significantly (118.5 versus 120.6, $P < .32$; Table 3). GHHS students in the class of 2009 were aware that they had been selected for GHHS when we administered the posttest JSPE, unlike the subsequent cohort.

RWJMS class of 2010

Change in empathy scores. We received both pretest and posttest data from a total of 73 (71% of 102) students (39

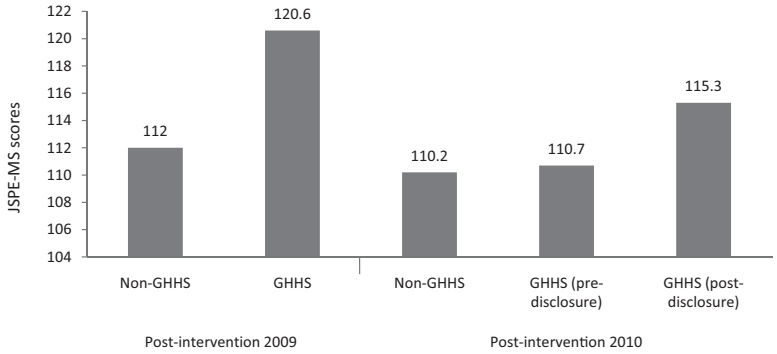

Figure 3 Robert Wood Johnson Medical School class of 2009 and 2010 postintervention Jefferson Scale of Physician Empathy Medical Student Version scores by Gold Humanism Honor Society membership.

female and 34 male). Mean change in pretest/posttest empathy score was not significant for the class as a whole (pre = 112.4, post = 110.5, $P < .07$; Table 2).

Demographic analysis. Demographic analysis of the class of 2010 showed lower pretest and posttest empathy scores in males than in females (pretest score: males 110.6, females 114.2, $P < .1$; posttest score: males 108.1, females 112.6, $P < .05$; Table 4). Unlike students in the class of 2009, JSPE scores for students in the class of 2010 showed significant decline if they were older than 24 years of age when entering medical school, had another career prior to medicine, or had experienced an illness in a loved one (Table 4). Similar to the female students in the class of 2009, the female students in the class of 2010 had significantly higher posttest empathy scores (compared with their male classmates); however, unlike in 2009, students in core specialties, GHHS members (prenotification), and those who had been previously hospitalized did not have significantly higher posttest scores compared with their classmates who were in the noncore specialties, who were not GHHS members, and who had not been hospitalized (Figure 2 [bottom]).

Subgroup analysis for GHHS. Because of the striking posttest difference in JSPE score in GHHS versus non-GHHS students in the class of 2009, we hypothesized that the GHHS "label" may have had an effect on the GHHS students' posttest JSPE scores; therefore, we did not inform the students in the class of 2010 who were selected for GHHS of their selection until *after* we administered the posttest JSPE. For these students, empathy scores initially showed a significant decrease on the JSPE posttest (116.1 versus 109.7, $P < .03$; Table 4). Two months later, we notified the class of 2010 of the results of the GHHS selection; those students who had been selected for GHHS completed the posttest once again. The only information they received was that the investigators wished them to take the JSPE posttest a second time. Scores on the JSPE-MS postdisclosure rose significantly, returning to the level of pretest scores (109.7 versus 115.3, $P < .016$; Figure 3).

Discussion and Conclusions

To our knowledge, this is the first primary data study that demonstrates preservation of empathy in two consecutive third-year medical school classes. Although we cannot be certain that the H&P intervention was responsible for the lack of decline in empathy, student feedback indicated that the sessions helped them "prevent burnout" and recognize positive and negative role models. Throughout the sessions, students expressed excitement and pride in helping to make a diagnosis, altruism and concern in their attitudes toward patients, and admiration and respect for positive role models. We used blogs and trigger articles to initiate discussion of fear of failure, dismay at the behavior of negative role models, and guilt at being privy to very private moments in patients' lives—as well as appreciation for that same privilege. Students agreed that both admitting their own mistakes and watching others disclose medical errors to patients was difficult. They admitted to feelings of insecurity in their own knowledge and skills, and they expressed relief both at the opportunity to discuss these feelings and at the realization that their classmates shared these feelings.

Feedback from students indicated that small-group discussion and blogging were the most useful components of the H&P sessions. Anonymous blogging may be more efficacious than traditional forms of narrative writing for Generation Y medical students[46]; it is comfortable, anonymous, interactive, and shared.

We are encouraged by the fact that, by the end of the year, our students' self-reported agreement with the statement, "Viewing things from a patient's perspective is not difficult," *in*creased (as measured by the JSPE). To illustrate, one student wrote in his final blog:

> We've all seen examples this year of sarcastic and uncompassionate behavior. Just remember that as the only physician in the room of 10-plus caregivers, you're the top dog and you may very well control the tone of the meeting. If you lack compassion and empathy, it may make it more difficult for others around you, or worse, your behavior may be contagious…. Showing compassion and approaching each patient with empathy is never naïve; it's called being a good doctor. If bad behavior can be contagious, then maybe empathy and compassion can be too.

The difference in JSPE empathy scores between students whose peers selected them for the GHHS and their non-GHHS classmates was a serendipitous finding. The GHHS was instituted at RWJMS as a means of reinforcing humanistic values in our medical school community. GHHS students' behavior, assessed by peers, identifies them as a distinct group.[31] Results for GHHS students in both classes show that these students scored differently than classmates on both pretests and posttests. The RWJMS class of 2009 pretest and posttest scores were higher for GHHS students whose scores rose significantly at the conclusion of their clerkship year. We hypothesized that because GHHS students in this class knew of their selection prior to their posttest, being chosen for GHHS may have reinforced their self-identification as empathetic physicians and resulted in a rise in JSPE scores. This explanation is corroborated by data from GHHS members in the class of 2010 whose posttest JSPE scores initially declined but later rose significantly when we notified them of their GHHS status. In contrast, students elected into AOA showed no significant differences in JSPE scores before and after the third year (data not shown). Peer validation of GHHS

Table 3

Mean Jefferson Scale of Physician Empathy Medical Student Version Scores by Demographic Characteristics, Robert Wood Johnson Medical School Class of 2009

Characteristic	Number	Pretest score	Posttest score	*P* value (two-tailed)	*P* value for mean change (two-tailed)
Gender					
Male	46	113.2	111.6	.21	.62
Female	43	117.7	116.4	.40	
Specialty					
Core	44	117.9	116.3	.20	.29
Noncore	44	112.9	111.5	.40	
Age (starting medical school)					
20–21	20	114.5	113.7	.70	.51*
22–23	41	114.9	112.2	.06	
24+	21	116.8	116.2	.76	
Had prior career					
No	65	114.6	112.9	.14	.99
Yes	17	117.8	116.1	.39	
Experienced illness of close friend or family member					
No	55	114.1	112.5	.18	.94
Yes	27	117.6	115.8	.29	
Underwent prior hospitalization					
No	48	113.4	111.1	.07	.44
Yes	34	117.9	117.1	.62	
Member of Gold Humanism Honor Society					
No	67	114.5	112.0	.02	.06
Yes	15	118.5	120.6	.32	

* For age starting medical school, the *P* value mean change (two-tailed) is the value for the difference between younger age and older age.

students as empathic caregivers may have restored their perceived identity, underscoring the interpersonal nature of empathy assessment.

Two factors that limited our study are the inclusion of only two classes of medical students at a single institution (which limits generalizability) and the before-and-after design (which limits inferences about intervention effects). Further, we were unable to account for the differences in JSPE-MS posttest scores between the classes of 2009 and 2010 for two subgroups of students: those who had previously been hospitalized and those who were in the GHHS (before learning of their GHHS status). Students in these two subgroups in the class of 2010 showed a decrease in empathy on the JSPE posttest, as opposed to students in the class of 2009. Possibly, the differences in numbers of students who were available for the posttest in each year (because of scheduling conflicts and absenteeism) reduced our power to detect significant differences in these factors across the two classes. In both years, we recorded higher empathy scores at the pretest for older students, those who had a close friend or family member who had experienced illness, and those who were in the GHHS.

The JSPE-MS, although a validated tool, is a self-reported and, thus, subjective measure that may not objectively capture empathic behavior. Three-hundred-sixty-degree assessment may be preferable but is difficult to obtain in a clerkship setting. Others have noted the need for patient assessment of physicians to validate empathy.[23]

Members of the RWJMS class of 2010 differed from those of the RWJMS class of 2009 in prior experience, age at entering medical school, and exposure to a PCM course. Future studies with larger samples and a more homogeneous curricular experience may minimize sample variability and reveal stronger relationships in trends we observed.

Nonetheless, our findings suggest that empathy may be preserved in medical school despite prior evidence that a decline in empathy is pervasive; we believe that the H&P intervention may have attenuated this decline. Future studies that employ a large controlled trial in multiple institutions are needed to confirm these findings.

On the basis of our experience with two classes of students at RWJMS, we found that empathy may be preserved in third-year medical students. Furthermore, a curriculum that includes time for third-

Table 4

Mean Jefferson Scale of Physician Empathy Medical Student Version Scores by Demographic Characteristics, Robert Wood Johnson Medical School Class of 2010

Characteristic	Number	Pretest score	Posttest score	*P* value (two-tailed)	*P* value for mean change (two-tailed)
Gender					
Male	34	110.6	108.1	.11	.36
Female	39	114.2	112.6	.19	
Specialty					
Core	35	113.9	111.3	.06	.32
Noncore	38	111.3	109.9	.17	
Age (starting medical school)					
20–21	13	115.2	112.5	.03	
22–23	43	109.7	110.0	.41	.08*
24+	12	119.3	112.5	.06	
Had prior career					
No	59	111.2	110.7	.38	.01
Yes	9	120.6	112.3	.008	
Experienced illness of close friend or family member					
No	44	111.5	111.9	.42	.03
Yes	24	114.0	109.2	.008	
Underwent prior hospitalization					
No	53	112.3	111.6	.32	.15
Yes	15	110.9	105.6	.09	
Member of Gold Humanism Honor Society					
No	59	111.7	110.7	.26	.05
Yes	14	116.1	109.7	.03	

* For age starting medical school, the *P* value mean change (two-tailed) is the value for the difference between younger age and older age.

year students to share feelings in a protected and familiar venue during their rotations may attenuate a decline in empathy. In addition, programs like the GHHS, which validate humanistic behavior, may contribute to preservation of positive professional identity.

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Disclaimer: The opinions in this article are those of the authors alone and do not necessarily reflect those of the Arnold P. Gold Foundation for Humanism in Medicine or Robert Wood Johnson Medical School.

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Cover Art

Artist's Statement: Irresolute Figure

My work as a sculptor and training as a clinical psychologist have had a reciprocal relationship as long as I have been practicing both trades. Graduate psychology training taught me the rigors of the scientific method with reason, logic, and a reliance on empirical knowledge. It provided insight into the nature of human sensation and perception, attachment, motivation, thinking, and emotion. This knowledge has deepened my appreciation for the complex nature of the human condition—not only for individual differences, such as culture, personal, and familial experience, but also for those universal elements which link us all as human beings. I attempt to draw on this experience in creating artistic works which are primarily evocative in nature. I seek to evoke basic human drives and reactions, such as curiosity and the drive for mastery (the need to resolve visual ambiguity and reduce the rise in tension it creates); needs for connection, affiliation, touch, and sensuality; and finally, whimsy and not taking oneself too seriously.

Thematically, my work often reflects relationships—between people, forms in three-dimensional space, or both. More than 30 years of sculpting has heightened my awareness, patience, powers of observation, and sensitivity to both patients and students. It has enhanced my skills in distilling complex themes into their more digestible components and improved my ability to differentiate signal from noise. I've come to see the "subtractive" process of direct carving as a loose metaphor for some forms of psychotherapy—removing obfuscating layers that don't belong, revealing the sculpture hidden within.

Irresolute Figure

I use sculpture to express my aesthetic sensibilities. The choice of wood as my preferred medium relates to its living and organic nature, the diverse challenges of its many textures and grains and its inherent warmth and sensuality, which readily invite touch. I approach each piece with both tough- and tender-mindedness. Tough-mindedness is evidenced in technical details, such as painstaking attention to wood finishing and removing tool marks, integrity of component forms and the transitions between them, and the use of grain, natural defects, and unique features of the wood to enhance the piece's visual and emotional impact. Tender-mindedness is seen in the warmth, suppleness and sensual nature of the figures and the use of forms and contours that caress the eye as the viewer traverses a given sculpture's landscape.

I seek to simplify my subject matter by capturing some essence of the subject and presenting it in a way that has the greatest effect with the least amount of complexity. The shapes and forms I use are, for the most part, naturally occurring and anatomical and therefore, at least in some sense, are familiar to the viewer even though their integration may not always be easily recognizable. I value simplicity in form and efficiency in the use of lines, and I attempt to portray my subject matter through its fundamental qualities or nature.

It is with this philosophy in mind that I approach my process. I am a direct carver who works almost exclusively in wood, as I have with *Irresolute Figure*. I examine raw wood for cracks or checks and then study its inherent possibilities, taking into account its grain, color, density, and any unique defects. I usually begin by visualizing forms I believe are already contained within the wood and then using my skills to release them. To do this, I use an adze or ax to rough out main forms and, as the concept crystallizes, I use a wide variety of wood chisels, rasps, and rifflers to remove waste and refine the forms through a series of successive approximations. Finally, I sand and smooth each work with a variety of abrasive tools and papers until it begs to be touched. I use no stains, dyes, or artificial surface finishes—only neutral penetrating oils and/or clear wax.

Richard A. Weiner, PhD, ABPP

Dr. Weiner is a sculptor and board-certified clinical psychologist practicing in Narberth, Pennsylvania. More of Dr. Weiner's sculpture may be found at www.richardweinersculptor.com.