

## Abstract Session D4: Medical Humanities and Ethics

**Ethics Education across the Curriculum: How Do Medical Students Relate Pre-Clinical Learning to Clinical Experience?** Lauris C. Kaldjian<sup>1</sup>; Laura Shinkunas<sup>1</sup>; Valerie Forman-Hoffman<sup>1</sup>; Marcy Rosenbaum<sup>1</sup>; Jerold Woodhead<sup>1</sup>; Lisa Antes<sup>1</sup>; Jane Rowat<sup>1</sup>. <sup>1</sup>University of Iowa Carver College of Medicine, Iowa City, Iowa . (Proposal ID # 10715)

**BACKGROUND:** Ethics education in medical school occurs predominantly during the pre-clinical years. Little is known about how the cognitive content of this education is remembered, perceived, and applied after students enter the clinical environment.

**METHODS:** We gathered data from third-year medical students during Internal Medicine and Pediatrics clerkships at the University of Iowa in 2007-08 through (1) a voluntary written survey and (2) content analysis of required written reflections about ethical and professional issues encountered during these clerkships. The survey queried: attitudes toward the clinical relevance of their second-year ethics course; knowledge about four ethical principles, other sources of ethical value, and a systematic approach to ethical reasoning taught and practiced in their second-year ethics course (using: *A Clinician's Approach to Clinical Ethical Reasoning*. JGIM 2005;20:306-311); and perceptions about ethics in the clinical environment. Three investigators used content analysis to identify ethical principles, other sources of ethical value, and goals of care in students' written reflections. NVivo qualitative software and SAS were employed to calculate frequency and chi-square statistics. Students' prior performance data from the second year (from a paper and a multiple choice exam during the ethics course) were also examined.

**RESULTS:** From a class of 141 third-year students, 109 (77.3%) were included for analysis based on completion of study components. The four ethical principles were recalled by most students (beneficence 95.4%, nonmaleficence 95.4%, autonomy 71.6%, justice 82.6%), but other sources of ethical value were recalled less frequently (rights 11.9%, consequences 10.1%, comparative cases 16.5%, professional guidelines 18.4%, conscientious practice 21.1%). Out of 15 possible items within the systematic approach to clinical ethical reasoning taught in the second year, 34.9% of students cited 0-3 items, 50.5% cited 4-6, and 14.7% cited 7-9. Content analysis of reflections showed that no one of the four ethical principles was mentioned in more than 16% of reflections, and goals of care were mentioned in only 14.7%; by contrast, consequences were mentioned in 51.4%. Students who scored 90-100% on the multiple choice exam in the second-year ethics course were able to recall more sources of ethical value ( $P=0.02$ ) and were more likely to refer to goals of care in their reflections ( $P=0.02$ ). Most students believed the content of the second-year ethics course was relevant to medical practice (71.6%) and helped prepare them for the challenges they faced in the clinical environment (58.7%), that ethics and medicine are inseparable (93.6%), that they are able to recognize key ethical obligations and challenges (96.3%), and apply a systematic approach to clinical ethical reasoning (65.1%). Students were more likely to believe that ethical and professional values in the clinical environment are practiced (71.6%) than discussed (44.0%).

**CONCLUSION:** Most third-year medical students in this study appear to recognize the clinical relevance of ethics and be satisfied with their pre-clinical ethics education. Though most can recall the names of four ethical principles, few are able to recall the names of other sources of ethical value or describe most of the components of a systematic approach to clinical ethical reasoning.

**The Disclosure Gap: Patient and Provider Perspective on the Quality of Actual Disclosures** Thomas H Gallagher<sup>1</sup>; Douglas Brock<sup>1</sup>; Mary Eichler<sup>2</sup>; Alan Lembitz<sup>3</sup>; David M Studdert<sup>3</sup>; Jeff Varnell<sup>3</sup>; Dennis J Boyle<sup>4</sup>. <sup>1</sup>University of Washington, Seattle, Washington ; <sup>2</sup>COPIC, Denver, Colorado ; <sup>3</sup>University of Melbourne, Melbourne, N/A ; <sup>4</sup>University of Colorado Health Science Center, Denver, Colorado . (Proposal ID # 10943)

**BACKGROUND:** Disclosing unanticipated outcomes to patients is an expectation of accreditation standards and national quality organizations. Preliminary studies suggest that a sizable gap exists between these expectations and current practice. Yet few studies have measured the quality of actual disclosures.

**METHODS:** We developed and validated a brief survey to assess patients' and physicians' ratings of the quality of actual disclosures. The surveys were administered to patients and physicians who were participating in the 3Rs program of COPIC Insurance, a program to promote disclosure of certain unanticipated outcomes and to reimburse patients for out-of-pocket expenses and lost time. Patients and physicians rated the overall quality of the disclosure. Patients were also asked whether specific disclosure elements recommended by consensus guidelines were present in the discussion, and how likely they were to return to this physician if they needed similar care in the future. The surveys were distributed to 908 patients and 936 physicians between 2007-2009 after management of the event in the 3Rs program had been concluded.

**RESULTS:** Surveys were returned by 817 physicians (87%) and 514 patients (57%). Physicians and patients did not agree on the severity of the event in question. 33% of patients considered the event to be "extremely serious (I might have died)", compared with 8% of physicians ( $P < .0001$ ). When asked to rate the quality of the disclosure on a scale from ("extremely dissatisfied") to ("extremely satisfied"), physicians were much more satisfied with the quality of the disclosure (mean 8.1) than were the patients (mean 6.2,  $P < .001$ ). 41% of patients rated the quality of the disclosure as a "5" or less. Regarding patient assessment of specific disclosure elements, physicians scored highest on explaining the event in terms the patient could understand (68% agreed), providing a sincere apology to the patient (65% agreed), and being truthful when explaining the event (64%). In contrast, only 37% of patients agreed that the physician assured them that steps would be taken to prevent similar events from happening again. Ten items from the patient survey were combined into a Patient Satisfaction Scale (Cronbach alpha=.96). Lower Patient Satisfaction scores were associated with higher patient perception of the severity of the event (Spearman correlation = .15,  $P = .002$ ) and with a lower likelihood of returning to that physician for future care (Spearman correlation = -.78,  $P < .001$ ).

**CONCLUSION:** Measuring patient and physician ratings of actual disclosures is feasible, and reveals substantial shortcomings. Routinely measuring disclosure quality could help organizations target efforts to improve these challenging conversations.

**JGIM Peer Review** Jeffrey Jackson<sup>1</sup>; Malathi Srinivasan<sup>2</sup>; Joanna Rea<sup>3</sup>; Kathlyn Fletcher<sup>1</sup>; Richard Kravitz<sup>2</sup>.  
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**BACKGROUND:** Peer review for medical journals is an important, but poorly studied process. Our study's purpose was to evaluate the predictive validity of the peer-review process at the Journal of General Internal Medicine (JGIM). Specifically, this study examines the impact of original research manuscripts both published and rejected by JGIM, using subsequent manuscript publication and citation number as measures of impact.

**METHODS:** We included research submissions to the Journal of General Internal Medicine for 1 year (July 2004-July 2005). We selected this window to allow time for rejected manuscripts to be published elsewhere. For articles sent out for review by JGIM, we abstracted peer reviewer ratings of article quality in five domains (interest, originality, statistics, validity, clarity) as well as reviewer's publication recommendation (accept, minor revision, major revision, reject). We determined publication status for articles rejected by JGIM by searching PUBMED and contacting authors. For all published articles, we measured the 3-year article citation rate (from ISI) and calculated an impact factor (Rw) by dividing its 3-year citation number by the average citations for 3 years among general medicine journals. An  $Rw > 1.0$  indicates above average impact. Desirable outcomes (from the journal's perspective) would be to accept articles with high impact ( $Rw > 1.0$ ) and reject those with low impact ( $Rw < 1.0$ ). Because the data were skewed by outliers with high impact, nonparametric tests were used to compare groups.

**RESULTS:** Among 507 JGIM research submissions, 223(44%) were rejected without review, 142 (28%) were rejected after review and 142 (28%) were accepted. Among rejected articles 243 (48%) were published elsewhere and 136 (27%) were not published. Articles rejected without review were less likely to be published elsewhere than those rejected after review (RR: 0.63, 95% CI: 0.42-0.95). The median JGIM articles impact was 1.1 (range 0-7.2). Articles published in JGIM had greater impact than rejected articles ( $p=0.0001$ ), but there was no difference in Rw between articles rejected with or without review (Rw: 0.6 vs. 0.8,  $p=0.28$ ). Reviewer quality ratings had good internal consistency (Cronbach alpha: 0.79) and there was strong correlation between quality ratings and the reviewer's recommendation regarding publication ( $r=0.7$ ). The reviewer's quality rating also correlated with article citation rates; a one point increase in average quality rating increased the impact (RW) by 0.2 (95% CI: 0.02-0.4). However, there was no quality rating cut point that accurately distinguished high from low impact articles. On multivariable analysis, interest to JGIM readers (OR 1.3, 95% CI: 1.1-1.7), originality (OR: 1.4, 95% CI: 1.2-1.8) and validity of conclusions (1.7, 95% CI:1.4-2.1) increased the likelihood of acceptance. However, there was low inter-rater agreement between reviewers for either quality ratings or publication recommendations. Seventy-one percent of submissions had "desirable" outcomes (18% accepted with  $Rw > 1.0$ , 53% rejected with  $Rw < 1$ ); undesirable reviewer outcomes occurred in 29% of submissions. There was evidence that a greater number of reviewers collectively increased the accuracy in discriminating articles with higher or lower impact.

**CONCLUSION:** The editorial publication decision accurately discriminated high and low impact articles in 71% of submissions. While there was good evidence reviewers were internally consistent, there was poor agreement between reviewers for either quality ratings or publication recommendations. The accuracy of sorting is improved with a greater number of reviewers. Our data was not sufficient to determine the optimum number of reviewers.

**How do physicians think about stewardship in health care? A qualitative national study.** Matthew K. Wynia<sup>1</sup>; Timothy Dawson Hotze<sup>1</sup>; Lynn M. Clement<sup>2</sup>; Amy M. Allen<sup>3</sup>; Joanna A. Wicher<sup>1</sup>; Kenneth J. Tomaszewski<sup>3</sup>. <sup>1</sup>American Medical Association, Chicago, Illinois ; <sup>2</sup>KJT Group, Honeoye Falls, New York . (Proposal ID # 11636)

**BACKGROUND:** Stewardship may be defined as the judicious management of community resources entrusted to one's care with the aim of using the resources to the long-term benefit of the community. In health care, physicians are often entrusted with decision-making authority to spend pooled resources, whether through private insurance or government programs. We sought to understand how physicians think about the notion of stewardship and their role, if any, in serving as stewards to ensure the sustainability of the health care system.

**METHODS:** Using a literature review a theoretical framework was developed for assessing physician views on stewardship. This framework was initially tested using online bulletin boards (similar to focus groups) with a nationwide convenience sample of 32 physicians to explore and validate proposed item categories. Survey items were then developed in several domains: cost awareness, decision-making empowerment, and attitudes and behaviors reflecting a stewardship orientation. Items were tested using a card sort exercise in which physicians grouped items together based on similar constructs and themes. This was conducted through web-assisted telephone in-depth interviews (TIDIs) with 35 physicians to assess psychometric properties and for item reduction. A shorter version of the survey was then tested with 18 physicians, again using web-assisted TIDIs, to refine items and elicit further views and experiences in relationship to the concept of stewardship.

**RESULTS:** Overall, 85 physicians participated in online bulletin boards or completed a version of the survey during web assisted TIDIs (56 PCPs and 29 specialists). All endorsed the notion of an obligation to serve as an advocate for individual patients. At the same time, community health and national policy issues are top of mind for many physicians; but while cost to individual patients often affects testing and treatment recommendations, costs to payors or the larger community are rarely considered. Many physicians understand the concept of the larger community paying for the use of very expensive care through an "insurance pool," but they do not see this affecting the care they deliver to their own patients. Instead, physicians found time management, use of drug samples, and the spread of communicable diseases to be meaningful examples of how care decisions for one individual might affect others. In addition, most physicians feel some responsibility for controlling overall spending, but few feel empowered to do so for a number of reasons, including litigation risks, patient demands, limited options, and the belief that patients should ultimately be responsible for making care decisions. Specialists are generally less aware of costs than PCPs; PCPs are also more likely to provide multiple testing and treatment options, while specialists often report presenting only what they view as the best option to the patient. A minority of physicians have heard the term "medical stewardship," though it generally raised positive connotations in open ended questions.

**CONCLUSION:** Many physicians believe they are the party most responsible for making spending decisions and healthcare resource allocation. Moreover the concept, if not the term, "medical stewardship" makes sense to most physicians; yet it rarely affects testing and treatment recommendations. Physicians uniformly endorse an ethical obligation to respect patient rights and provide optimal quality care. Developing a shared understanding of how physician obligations toward ensuring a sustainable health care system fit into this core professional ethic is important. Specific examples of how individual care decisions can affect the larger community might be helpful in this regard, as would be efforts to help physicians serve as effective stewards of shared health care resources while continuing to be advocates for individual patients.

**Providing Support to Patients in Emotional Encounters: A New Perspective on Missed Empathic Opportunities** Ian Hsu<sup>1</sup>; Somnath Saha<sup>2</sup>; Philip Korthuis<sup>2</sup>; Victoria Sharp<sup>3</sup>; Jonathan Cohn<sup>4</sup>; Richard Moore<sup>1</sup>; Mary Catherine Beach<sup>1</sup>. <sup>1</sup>Johns Hopkins University, Baltimore, Maryland ; <sup>2</sup>Oregon Health Science University, Portland, Oregon ; <sup>3</sup>St. Lukes-Roosevelt, New York, New York ; <sup>4</sup>Wayne State University, Detroit, Michigan . (Proposal ID # 11852)

## **BACKGROUND:**

Responding empathically to patients who express emotions can strengthen the patient-physician relationship and is considered an important feature of patient-centered communication. Yet studies have repeatedly found that physicians miss 70-90% of opportunities to express empathy. Our study sought to describe how physicians respond to the expression of strong patient emotion, and to explore the reasons for lack of empathic responses.

## **METHODS:**

We conducted a qualitative analysis of 47 audio recorded encounters between HIV-infected patients and their providers. Informed by previous work in the area, we first defined empathic opportunities as instances where patients expressed a strong negative emotion. We then examined physician responses, generated a coding scheme through iterative team discussion, and applied it to all empathic opportunities identified in visit transcripts. Two authors (IH and MCB) discussed and agreed on all final categorizations.

## **RESULTS:**

Twenty-one of 47 encounters (45%) contained at least one empathic opportunity. In these 21 encounters, there were 29 distinct opportunities; 20 involved psychosocial issues (logistical life problems, family strain, or death/illness of a loved one), and 9 involved biomedical concerns. Physicians typically offered more than one type of response to each empathic opportunity. These response types included *dismiss/minimize*, *ignore/change topic*, *elicit information*, *problem-solve* ("Have you thought about a support group?"), or *empathize* ("Sorry it's been such a tough month"). Empathic statements occurred at some point in the response sequence in 13 of 29 opportunities (45%). When problem-solving was the initial response, empathic statements rarely occurred in subsequent dialogue. Among the 16 instances with no empathic statements, physicians engaged in problem-solving about the issue in half (8/16, 50%). Logistical life problems (e.g. unemployment) and biomedical problems elicited more problem-solving and less empathy, whereas family strain or death/illness tended to elicit more empathy. Both problem-solving and empathy appeared to be explicit attempts to provide support to the patient - problem-solving focused on circumstances surrounding emotion whereas empathy acknowledged emotion itself.

## **CONCLUSION:**

Similar to other studies, we found providers missed most opportunities to respond empathically to patient emotion. Yet contrary to common understanding, physicians often missed these opportunities when attempting to address the problem underlying the emotion, especially when the problem involved logistical or biomedical issues, as opposed to grief or stress. With enhanced awareness of this phenomenon, clinicians may better recognize situations where they can offer empathy in addition to problem-solving. Future research should assess patients' desires for problem-solving, empathy, or both in different emotional situations.

**Heroism and Reality: Portrayal of CPR and DNRs on ER, House & Gray's Anatomy, 2004-2010** Carla C Keirns<sup>1</sup>; Katherine Keirns<sup>2</sup>; Peter Dashkoff<sup>1</sup>; Lynn Hallarman<sup>1</sup>. <sup>1</sup>Stony Brook University, Stony Brook, New York ; <sup>2</sup>Rutgers University-New Jersey Institute of Technology, Newark, New Jersey . (Proposal ID # 12113)

**BACKGROUND:** Television medical dramas reach millions of Americans each week, entertaining them with a fictionalized view of medicine that has become increasingly sophisticated as television shows have brought in medical consultants. Prior studies have found that survival rates from CPR on television are unrealistically high, and may lead patients or families to have unrealistic expectations.

**METHODS:** We undertook a systematic study of CPR and DNR events on three popular television dramas. In order to minimize the role of secular trends or technological change, all show seasons were contemporaneous, including ER seasons 11-15 (2004-2009), House seasons 1-6 (2004-2010), and Gray's Anatomy seasons 1-6 (2005-2010). The focus of the study was the clinical circumstances of cardiac arrest, survival after CPR, survival to hospital discharge or the end of the episode, disability after CPR, use of DNR orders, and the debriefing process after CPR. Because each television show had different frequencies of CPR and different patterns of age and cause of arrest, the unit of analysis was the CPR episode, with 26 variables collected for each arrest. Coding was done by two physicians and one graduate research assistant, with the first 5 episodes of each series independently coded by all three investigators based on preliminary codes, then codes finalized, then all episodes coded by one coder with 20% of episodes coded by a second coder. All disagreements between the two coders were reviewed by all three investigators, with reviewing of the relevant video. All discrepancies were resolved easily. Of 8814 coding decisions, double coding was performed for 1762, and coders concurred initially on 1735 of these decisions (98.47%). Cohen's Kappa for agreement is 0.965 with a 95% CI of 0.952 to 0.978.

**RESULTS:** The study had a total of 115 arrests on ER, 141 arrests on Gray's Anatomy and 83 arrests on House. The survival rates were: ER 47/115 (40.8%) of whom 16/115 (13.9%) survived the episode, Gray's Anatomy 42/141 (29.8%) of whom 20/141 (14.2%) survived the episode, and House 55/83 (66.3%), 51 of whom survived the episode (61.4%). Of 339 arrests across all 3 shows, in only 7 cases was disability after CPR discussed, with 2 patients meeting criteria for brain death, one severe cardiac damage, one severe pulmonary damage "he's gonna need a lung transplant", and 3 with a general discussion of the likelihood of a poor outcome after prolonged CPR. DNR orders were rare across all shows, with 4 out of the 141 arrests on ER, all in the setting of known end-stage disease, and all honored on the show. There were 4 DNR orders out of the 141 arrests on Gray's Anatomy, one of which was followed, in a patient who had both cancer and a "massive stroke", the other 4 were knowingly ignored. After the one DNR that was followed on Gray's Anatomy the patient's husband returns 3 episodes later on a shooting rampage (season 6 climax).

**CONCLUSION:** Survival rates from CPR on television vary by television show, but ER and Gray's Anatomy's statistics are consistent with US in-hospital arrest results. House shows unrealistically high survival. DNR orders are systematically ignored on Gray's Anatomy and House.