Broom M, Guild C, and Ahmadi Nasab Emran S. *MedEdPublish* 2015, 4: 12
http://dx.doi.org/10.15694/mep.2015.004.0012

Article **Open Access**

Professional Bioethics in Graduate Medical Education: a Curricular Innovation to Improve Communication and Professionalism

Matthew A. Broom, Camelia Guild, and Shahram Ahmadi Nasab Emran

Corresponding author: Matthew A. Broom broomma@slu.edu

Department: Department of Pediatrics, Saint Louis University School of Medicine at SSM Cardinal Glennon Children's Medical Center 1465 S. Grand Blvd., St. Louis, MO 63104

Received: 05/03/2015
Accepted: 18/03/2015
Published: 18/03/2015

Abstract

Introduction: There are requirements for resident training in professionalism, but without much specification, and variation exists with regards to how these requirements should be met. We describe a novel hybrid *Professional Bioethics in Graduate Medical Education* course, which utilized both online modules and small-group discussions to teach bioethics and professionalism.
Methods: Pediatric, internal medicine, neurology, and psychiatry residents were given the opportunity to complete online modules prior to participating in a series of small-group discussions. Topics included patient hand-offs, difficult patients, medical mistakes, patient-physician relationships, and physician-influence from industry. Residents completed anonymous evaluations upon completion of the modules and at course completion.
Results: 140 residents (42 pediatric, 52 internal medicine, 22 neurology, and 24 psychiatry) enrolled in the course and completed 191 surveys evaluating the modules. Resident surveys indicated that small-group discussions were an important method of learning (80%). Surveys noted that having frank, open discussions with other residents was a useful format (85%). Although residents reported that they enjoyed the online modules, only 10% routinely accessed the posted materials.
Conclusion: Although online modules are accessible and useful for certain aspects of learning, small-group discussions may provide a more successful forum to provide this education in bioethics and professionalism.

Practice Points

- Residents value education on common issues in professionalism and appreciate peer and faculty insights related to these topics
- Small group discussions afford the best format in medical education for guided learning and reflection related to ethics and professionalism
- Online curricula have promise as feasible methods to introduce content on clinical dilemmas in professionalism, however require significant monitoring and faculty investment

Keywords: Professionalism, bioethics, residency and online curriculum

Article

Introduction

The Accreditation Council for Graduate Medical Education (ACGME) sets standards for resident training across multiple specialty programs. The ACGME's approach is based on the foundation of six core competencies: medical knowledge, patient care, communication, professionalism, systems-based practice and practice-based learning and improvement.(Education, 2013) Of these, the teaching and subsequent objective demonstration of competency in medical communication and professionalism are often the most difficult.(Frohna, McGregor, & Spector, 2009)

There are a variety of professionalism and/or ethics educational curricula that have been deployed across different residency training programs.(Adam, 2011; Carrese & Sugarman, 2006; Hafferty & Franks, 1994; Marco et al., 2011; Radwany & Adelson, 1987) Curricula differ when it comes to target audience, topic focus, methods, teaching modality, timing, evaluation and follow-up.(Lang, Smith, & Ross, 2009) There has been a shift from a "classical" form of ethics instruction, one focusing on definitions of various time-tested ethical principles(Beauchamp, 2001) (i.e. respect for autonomy, beneficence, non-maleficence, and justice) culminating in interpretations on complicated "big-case" exercises to one of more common, "everyday" ethical issues.(Kon, 2006; Liaschenko, Oguz, & Brunnquell, 2006; Opel & Olson, 2012; Wear & Castellani, 2000) The latter of these two approaches is more relevant to the clinician in training who will see and experience countless episodes of everyday ethical scenarios versus those that traditionally are handled by an institution's ethics committee.(Liaschenko et al., 2006; Opel & Olson, 2012)

With the growing need to optimize educational opportunities for residents within the restrictions of duty hours, developing a successful asynchronous, online curriculum to assist with the teaching of professionalism and bioethics would have broad implications.(Cook, Sobotka, & Ross, 2013; Weil, 2005) There are few available online curricula that teach professionalism and bioethics,(Hendee et al., 2012; Nickol D, 2012; Sandlow, York, & Hammett, 2000) and even fewer that utilize online modules for teaching residents in primary care.(Kesselheim J, 2010) The goal of our project was to develop, pilot test, and assess a novel web-based *Professional Bioethics in Graduate Medical Education* (PBGME) course, applicable to a variety of GME programs (which did not previously have standardized or consistent ethics curricula), utilizing online modules to serve as starting points for later small-group discussions of everyday issues in bioethics and professionalism. We hypothesized that such a hybrid curriculum would be 1) a feasible way of providing valuable educational resources 2) readily accessible and 3) a satisfactory method of learning about bioethics and professionalism among residents.

Methods

We developed a set of 5 online modules addressing everyday bioethical issues in professionalism and medical communication applicable to physicians across different specialties. "Everyday" topics were defined as those that occur commonly in clinical practice, have direct relevance to resident physicians' medical training, touch on ethical dilemmas for which timely decisions are usually required, and teach residents critical skills surrounding professionalism and medical communication.

Module topics were selected based on a combination of the clinical frequency for each of the selected issues and resident feedback. Modules covered a variety of issues including patient hand-offs (PH), the difficult patient (DP), medical mistakes (MM), patient-physician relationships (PR) and physician-influence from industry (PI). Individual modules were composed of 1-2 core narratives with 1-2 supplementary resources depending on the topic (Table 1).

Table 1: Examples of Core Narratives and Supplementary Resources

Module	Core Narrative	Supplementary Resources
Communicating via Patient Hand-offs	Responsibility for Patients after the Handoff(Ethics, 2012)	I-PASS, a Mnemonic to Standardize Verbal Handoffs(Starmer et al., 2012) Transition of Care: Promoting Safe and Effective Handoffs(*Transition of care: promoting safe and effective handoffs*, 2011)
The Difficult Patient	Approaches to the Difficult Patient/Parent Encounter(Breuner & Moreno, 2011)	The Difficult Pediatric Encounter(Asnes & Shenoy, 2008) Understanding Communication to Repair Difficult Patient-Doctor Relationships from Within(Berger, 2012)
Medical Mistakes	Excerpts from 'When Doctors Make Mistakes' in Complications(Gawande, 2002)	The difficulty of disclosing medical errors(Selbst, 2003)
Patient-Physician Interactions	Maintaining boundaries with patients(Ontario, 2004)	Relationship status of digital media and professionalism(Farnan et al., 2009)
Physician-Industry Interactions	Following the Script: How Drug Reps Make Friends and Influence Doctors(Fugh-Berman & Ahari, 2007)	Physicians and the Investment Industry(Topol & Blumenthal, 2005) Physician Interaction and the pharmaceutical industry(Cicero, Curi, & Mercurio, 2011)

Core narratives were reflective or informational pieces aimed to push students to consider new or different perspectives about the various modules. Supplementary resources were additional references, evidence, or perspectives on the respective topic for students to access and review if desired. Each module was accompanied by a series of questions encouraging reflection on the topic (Table 2), particularly in the context of the participant's past experiences. Online modules were maintained via *SLU Global* (Blackboard Learn™), and were accessible only to those Saint Louis University School of Medicine residents enrolled in the program. Modules were released to participants 1-2 weeks prior to the scheduled small-group discussions.

Table 2: Reflection Questions

Module	Reflection Questions
Communicating via Patient Hand-offs	What are our responsibilities to a patient or family in executing a 'good' hand-off? How would you approach and provide feedback to a colleague who consistently does not deliver quality patient hand-offs?
The Difficult Patient	How to you approach patients or families who often are oppositional to your care? What is the value of spending time listening to patients or families vent about their frustrations? Are there limits to the medical care that we are able to provide for some patients?
Medical Mistakes	How do you prepare to speak with a patient and/or family about a medical error? Have you ever had to report an error that was not yours? How do we learn in medicine? How do we receive feedback? Do M&M conferences serve an ethical purpose in addition to that of QI and learning?
Patient-Physician Interactions	Should physicians accept gifts from patients? What, if any, expectations are attached to a gift? Are there differences between small and large gifts?

	Should physicians 'friend' patients on social network sites? Why or why not? How should physicians react when patients push for a relationship outside of the office?
Physician-Industry Interactions	What are our obligations to patients in our interactions with pharmaceutical companies? Is it possible to practice without bias or a conflict of interest when you receive a form of payment or other support? When and how do the lines of business and medicine blur with regards to patient care?

Small-group discussions were facilitated by clinical faculty in pediatrics and internal medicine (with experience in teaching ethics and professionalism to students, residents, and fellows) along with a doctoral student in health care ethics. Discussions occurred on average once every two months and lasted one hour in duration. Discussions occurred during designated didactic time for each residency program and typically included between 10-20 participants. Prior to the scheduled meeting, residents were sent an email notifying them of the online materials, discussion questions, and goals for the upcoming discussion. The goals for the small group discussions were to: 1) engage residents to consider their management of common ethical dilemmas 2) promote self-reflection and 3) encourage interaction among peers on management strategies. Small-group sessions began with an interactive presentation from a faculty facilitator and then moved to a discussion of the distributed resources and questions. This was predominately informed by resident experiences, insights, reflections, and consideration of each topic with regard to one's future clinical practice. Faculty presentations included didactic content that reviewed principles of professionalism and bioethics specific to the individual modules being discussed. Presentations would include 'Cases' to work through as interactive discussions with residents. The content was presented to stimulate discussion and foster resident engagement, reflection, teamwork and thought.

There were no material costs associated with the program. The *SLU Global* (Blackboard Learn™) software is available university-wide and is accompanied by IT support. The primary cost incurred with starting the PBGME program was the faculty time commitment spent developing the modules, building the online content, monitoring the SLU Global site, coordinating the timing of and facilitating the small-group sessions. Once created, modules and content could be readily updated to fit educational goals and/or provide new materials. Clinical faculty effort spent developing and maintaining the course was supported by the Albert Gnaegi Center for Health Care Ethics.

The course was offered to all residents in each respective training program. Participation was expected however there was no formal evaluation or elective credit associated with the course. Resident participation was directly linked to attendance at the small-group sessions. There was some variation in the make-up of the groups, as the first two sessions in pediatrics were with PGY1s (later sessions included PGY1-PGY3), the internal medicine sessions included only PGY2-PGY3 residents, and the neurology and psychiatry residents (PGY2-PGY4) met in a combined session. Residents completed anonymous online evaluations upon completion of each of the modules and at course completion. Course evaluations were developed by one of the authors (MB) based on faculty and resident input; no changes were made to the evaluation tools during the course. The evaluation instrument consisted of Likert-type questions on a 5-point scale ranging from "Strongly Disagree" to "Strongly Agree". Quantitative results were summarized using percentages. *IBM SPSS Statistics 20* was used for data analysis. Themes that surfaced in small-group discussions and on each module survey's free text comments were further categorized (Figure 1). Survey comments were reviewed by two of the authors (MB, SE) and a clinical faculty member in internal medicine who participated in the course. Written comments were compared to those verbalized comments that surfaced during the individual modules and categorized according to the survey options. The study was approved by the Saint Louis University Institutional Review Board.

Figure 1: Module Evaluation

Please circle **ONE** answer to the following statements:

1) This module has broadened my awareness regarding a common issue in professionalism, medical communication and/or bioethics.
Strongly Agree **Agree** **Neutral** **Disagree** **Strongly Disagree**

2) Discussing this module as an "everyday" issue in bioethics is an important part of graduate medical education.
Strongly Agree **Agree** **Neutral** **Disagree** **Strongly Disagree**

3) The narrative and additional resources posted on SLU Global for this module were useful.
Strongly Agree **Agree** **Neutral** **Disagree** **Strongly Disagree**

4) I have already received faculty instruction, formal or informal, on this topic during my training.
Strongly Agree **Agree** **Neutral** **Disagree** **Strongly Disagree**

5) I will be more conscience of some aspects of my clinical care and/or communication strategies as a result of this module.
Strongly Agree **Agree** **Neutral** **Disagree** **Strongly Disagree**

6) I enjoyed the narrative-discussion group format for examining the topic of this module.
Strongly Agree **Agree** **Neutral** **Disagree** **Strongly Disagree**

7) What are the best ways to improve this module for future residents?

8) What aspects of this module did you enjoy and why?

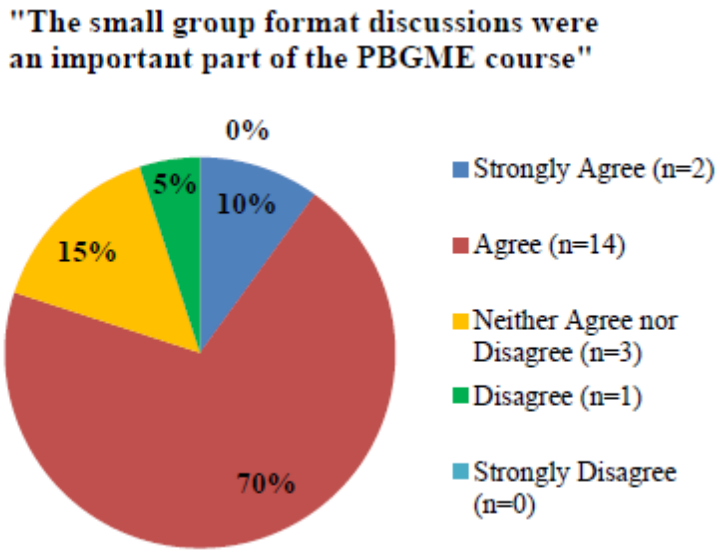
9) Based on the modules covered thus far, what other topics examining professionalism, communication or bioethics are you most interested in learning about?

10) What is your current level of training? Circle **ONE**: **PGY1** **PGY2** **PGY3** **PGY4**

Results

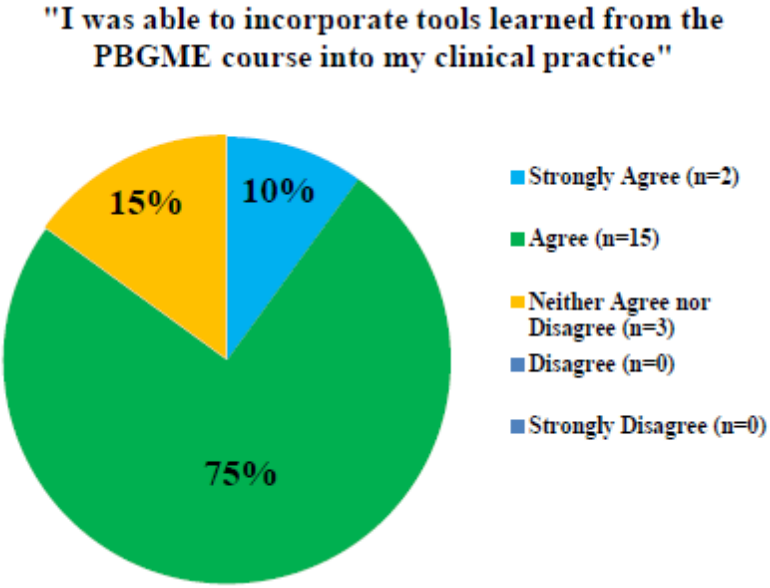
Between July 1, 2012 and June 30, 2013, all (140) residents in pediatrics (42), internal medicine (52), neurology (22), and psychiatry (24) enrolled in the PBGME course. Over half of the residents (N= 85) completed the Module 1 evaluations, 56.5% indicated previous experience using an online curriculum. Although all enrolled residents had access to the course, only 10% routinely accessed (viewed at least monthly) the online materials. Residents completed 191 anonymous surveys (Pediatrics n=31, Internal Medicine n=97, Neurology-Psychiatry n=63) evaluating the five individual modules. As surveys were anonymous, user responses could not be linked between modules, or to the feedback provided during small-group discussions. These surveys indicated that residents strongly felt (80%) that the small-group discussions were an important method of learning for the course (Figure 2) and 85% of surveys noted that having frank, open discussions with other residents about the course topics was a useful format.

Figure 2



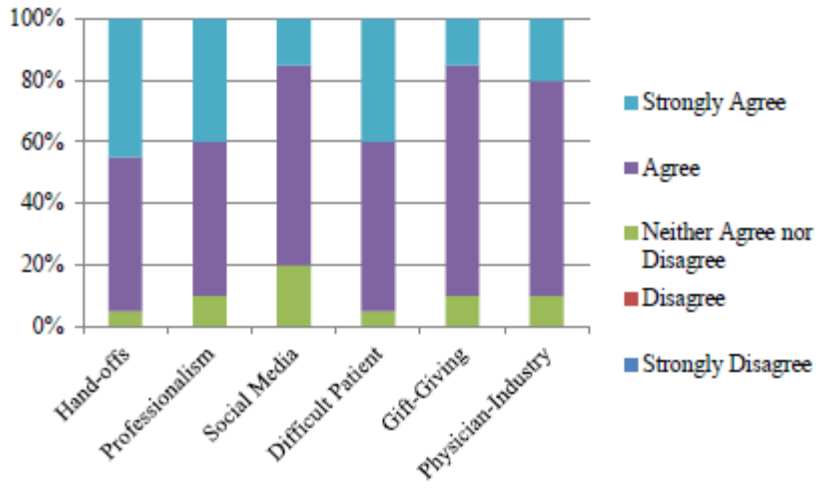
Among the four respective residency programs, only 20 residents (14%) completed the final online course evaluation. The majority of respondents were senior residents (PGY1 10%, PGY2 35%, PGY3 50%, PGY4 5%) and half of all respondents were from Internal Medicine. Of those who completed the post-course evaluation, 85% felt that they were able to incorporate the tools learned from the PBGME course into their clinical practice (Figure 3). Additionally, 80% of residents agreed or strongly agreed that discussing the topics in the PBGME course helped improve the quality of medical care that they were able to provide and 86% enjoyed the narrative-based discussion.

Figure 3



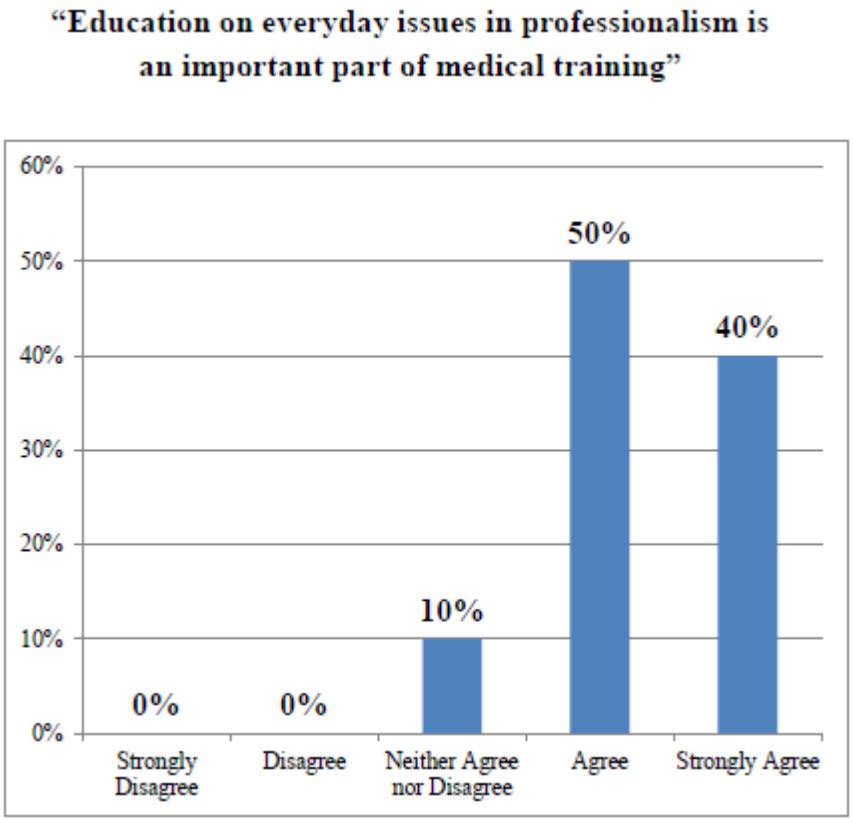
Of those who responded to the surveys, the majority either agreed or strongly agreed that education on hand-offs (95%), professionalism (90%), social media (80%), difficult patients (95%), gift giving (90%), and physician-influence from industry (90%) were important aspects of medical training (Figure 4).

Figure 4



Of those residents completing the post-course evaluation, 85% would recommend the PBGME course to another resident. The majority (90%) felt that education in professionalism was an important part of their graduate medical education (Figure 5).

Figure 5



Results from Small-Groups and Open-Ended Responses from Surveys

In both the small groups and on the post-module surveys, residents consistently commented (Table 3) that they enjoyed the opportunity to learn from the experiences of both their peers and faculty. Residents

enjoyed viewing online materials on their own time. Case examples were also appreciated as a way to initiate discussions, particularly when presented in light of a personal (shared) experience. During the small group discussions, it was apparent that residents were often worried about the various pressures encountered in GME and how those influences could potentially negatively affect the quality of their clinical care.

Table 3: Resident Top Five Comments about the PBGME curriculum

What was enjoyed the most	Proposed improvements	Desired future topics
Open, interactive, informal discussion	Provide modules earlier in training	End-of-life care
Small groups, shared experiences	More accessible materials	Financial hardships in medicine
Topics relevant to training	More personal experiences	Patient-provider and provider-colleague communication
Case examples	Continue to increase interaction between residents-faculty	Providing feedback
Learning about communication	Protected time for small-group discussion	Ethics of medical documentation

Residents were outspoken regarding the relevance of most modules, particularly with regards to the discussion on the ethics of hand-offs in medicine. Themes that were brought up across all programs included concerns about how to deliver well-timed, accurate hand-offs, and how to provide feedback to those who did not reciprocate.

Though interaction via social media (with colleagues, patients, and the general public) is not a required form of instruction within residency training, 80% of resident surveys indicated that it should be a standard part of their medical education. In the small-group discussions, residents were well informed about social media, including its power and pitfalls within clinical practice. Overall residents felt that completing the modules early on in their training would have the greatest impact on their future practice.

Discussion

A new approach to using issues encountered daily in clinical practice to teach bioethics and professionalism was well received by residents across training programs. Most resident surveys indicated that receiving education on aspects of medical communication and professionalism was an important part of residency training. Resident comments from both the small-group discussions and the post-module surveys (Table 3) highlight the open, informal small-group discussions in addition to the cases and shared experiences as particular strengths of the program. It was also interesting to see the amount of emphasis placed by residents on the moral and ethical responsibility between providers with each respective discussion about hand-offs. This feedback is consistent with previous studies(Carrese & Sugarman, 2006; Lang et al., 2009) on teaching medical ethics through small groups, but also in line with the learning styles (desire for use of technology, collaboration, team-based learning) of the millennial(Roberts, Newman, & Schwartzstein, 2012) generation which composes the majority of residents in training.(Taylor P, 2010) Resident acceptability of the PBGME program, measured by small-group attendance and participation(Kirkpatrick & Kirkpatrick, 2006), was also evidenced by the 10-20 attendees at each discussion session.

Today's residents respond well to principles of adult learning theory, particularly the safe, comfortable environment of a learning community grounded in mutual respect.(Billington, 1996) The survey results (Table 3) highlighted previous findings that small group discussions are largely successful in that they represent an opportunity to learn from and question both peers and faculty in a protected environment poised to facilitate knowledge sharing and communication.(Artino, 2013; Kost & Chen, 2014)

In the small groups examining appropriate physician-patient interactions, social media was a popular topic of discussion. There is a growing body of literature highlighting the importance of positive faculty modeling of "appropriate" social media physician presence for residents in training, and also on how to deal

with challenging interactions that present as a result of online social networking.(Chretien & Kind, 2013; Kind, Patel, & Lie, 2013) The use of social media in medicine will continue to evolve and become an even greater part of our instruction to trainees, and as a result, should merit consideration for any professionalism curricula.

When discussing professionalism, residents clearly value the experiences, insight, and personal examples of both peers and faculty. Residents appreciate the faculty perspective as it helps to break down stigma that mistakes or tough clinical scenarios only affect trainees. Seeing faculty discuss and model humility, and reflect on personal experiences with difficult clinical encounters promotes confidence and adds perspective for residents in training. Residents enjoy hearing the viewpoint of their colleagues as well, as they are living in the moment with similar clinical experiences, but rarely are able to debrief among their peers. Having scheduled, guided didactic time for residents allows them to benefit from peer-to-peer discussions; and secondarily helps with increasing morale and building a stronger group identity within a training program. For all of the reasons noted above, the faculty-facilitated small group discussions were strongest aspect of the PBGME program and allowed for the most resident reflection and learning related to professionalism education.

Our study was limited given the variations in group size, dynamics, and experiences among the respective programs. Most notably, despite having good overall and consistent course attendance (via online enrollment and small-group discussion), few residents completed the final course evaluation (14%) or routinely accessed the online modules (10%). Of those that did, the results strongly support a positive feeling for utilizing an open, didactic format to approach increasingly unclear issues which revolve around medical professionalism and bioethics in clinical practice. There may be both user and social desirability bias among those that completed the final online survey. With social desirability, respondents portray themselves in a more socially favorable light rather than being completely honest with their responses. Another limitation is a central tendency bias in which participants may avoid extreme response categories.

As the *SLU Global* (Blackboard Learn™) program is University-wide, ease of access was dictated at the institutional level and was beyond the control of the course directors or GME leadership. In order to access the PBGME course, participants were required to navigate through a series of six screen shots to reach each module's material. This may have negatively affected residents' interest in pursuing and subsequently reading the recommended resources. The acceptance, interest, and participation in the PBGME course increased over the academic year; however as the course did not ultimately result in a formal evaluation or have an impact on a resident's academic performance, it may have been perceived as less of a priority when faced with balancing educational demands from standard curricular rotations.

As previous authors(Kesselheim J, 2010; Nickol D, 2012) have noted, the success of teaching courses in ethics and professionalism in GME is highly dependent on the availability of dedicated time with residents, and residency leadership ensuring adequate attendance and participation. With the access barriers associated with the *SLU Global* system, utilization of online course materials was not high. Residents may have been more likely to review educational material if sent out either via email or text message(Broom, Adamson, & Draper, 2014) as a way to more directly increase their engagement. To further develop new GME bioethics and professionalism curricula, programs should thoroughly evaluate the barriers created by online educational tools and also consider how to best harness their strengths (24-hour accessibility, relative ease of use, ability to serve as a large information depot on specific topics, attraction to millennial generation).

Conclusion

The use of an online curriculum is feasible but must be appeal to residents' desire to learn, and requires close monitoring, program commitment, and significant faculty investment. To provide the highest standard of training to the next generation of resident physicians, medical educators should closely evaluate the ways their programs teach millennial trainees how to handle common issues in professionalism, and look to embrace formats that highlight the importance of communication skills, teamwork, perspective, and reflection.

Notes on Contributors:

Dr. Broom is Assistant Professor of Pediatrics, Saint Louis University School of Medicine and Adjunct Assistant Professor, Albert Gnaegi Center for Health Care Ethics. His clinical and research interests include medical education, professionalism, and improving health care communication and patient engagement through mobile technology.

Ms. Guild provides statistical support, consulting, and data analysis for the Department of Pediatrics as a member of Saint Louis University's Center for Outcomes Research.

Dr. Emran is a doctoral bioethics student at the Saint Louis University Albert Gnaegi Center for Health Care Ethics. He holds degrees in Ancient Languages and Culture (MA) and Theology, Ethics, and Culture (MA). His research interests include virtue epistemology, philosophy of medicine, virtue ethics, and metaethics.

Acknowledgements:

The authors would like to acknowledge the pediatric, internal medicine, neurology and psychiatry residents that participated in the course and their respective program directors. They would further like to acknowledge Erin Bakanas, M.D., M.A. for her work and assistance with helping to guide the resident small-group discussions.

Declaration of Interest:

This project was funded by support from the Saint Louis University Albert Gnaegi Center for Health Care Ethics.

References

Adam, M. B., Diekema, D. S., & Mercurio, M. R., eds. (2011). American Academy of Pediatrics Bioethics Resident Curriculum: Case-Based Teaching Guides. Retrieved from http://www.aap.org/sections/bioethics/default.cfm.

Artino, A. R., Jr. (2013). It's Not All in Your Head: Viewing Graduate Medical Education Through the Lens of Situated Cognition. J Grad Med Educ, 5(2), 177-179. doi: 10.4300/jgme-d-13-00059.1 http://dx.doi.org/10.4300/JGME-D-13-00059.1

Asnes, A. G., & Shenoy, A. (2008). The difficult pediatric encounter: insights and strategies for the pediatric practitioner. Pediatr Rev, 29(6), e35-41. doi: 10.1542/pir.29-6-e35 http://dx.doi.org/10.1542/pir.29-6-e35

Beauchamp, T.L. & Childress, J. F. (2001). Principles of biomedical ethics. 5th ed. New York: Oxford University Press.Berger, Z. (2012). Understanding communication to repair difficult patient-doctor relationships from within. Am J Bioeth, 12(5), 15-16. doi: 10.1080/15265161.2012.665141 http://dx.doi.org/10.1080/15265161.2012.665141

Billington, D. (1996). Seven characteristics of highly effective adult learning programs. New Horizons for Learning. Retrieved from http://education.jhu.edu/PD/newhorizons/lifelonglearning/workplace/articles/characteristics/index.html

Breuner, C. C., & Moreno, M. A. (2011). Approaches to the difficult patient/parent encounter. Pediatrics, 127(1), 163-169. doi: 10.1542/peds.2010-0072 http://dx.doi.org/10.1542/peds.2010-0072

Broom, M. A., Adamson, G. T., & Draper, L. R. (2014). Text messaging in medical education. Pediatrics, 133(3), e491-493. doi: 10.1542/peds.2013-1529 http://dx.doi.org/10.1542/peds.2013-1529

Carrese, J. A., & Sugarman, J. (2006). The inescapable relevance of bioethics for the practicing clinician. Chest, 130(6), 1864-1872. doi: 10.1378/chest.130.6.1864 http://dx.doi.org/10.1378/chest.130.6.1864

Chretien, K. C., & Kind, T. (2013). Social media and clinical care: ethical, professional, and social implications. Circulation, 127(13), 1413-1421. doi: 10.1161/CIRCULATIONAHA.112.128017 http://dx.doi.org/10.1161/CIRCULATIONAHA.112.128017

Cicero, M. X., Curi, M. B., & Mercurio, M. (2011). Ethics for the pediatrician: physician interaction with the pharmaceutical industry. Pediatr Rev, 32(1), e1-3. doi: 10.1542/pir.32-1-e1 http://dx.doi.org/10.1542/pir.32-1-e1

Cook, A. F., Sobotka, S. A., & Ross, L. F. (2013). Teaching and assessment of ethics and professionalism: a survey of pediatric program directors. Acad Pediatr, 13(6), 570-576. doi: 10.1016/j.acap.2013.07.009 http://dx.doi.org/10.1016/j.acap.2013.07.009

Accreditation Council for Graduate Medical Education. Common Program Requirements. (2013). Retrieved from http://www.acgme.org/acgmeweb/Portals/0/PFAssets/ProgramRequirements/CPRs2013.pdf.

American Medical Association Journal of Ethics. (2012). Ethics case: responsibility for patients after the handoff. Virtual Mentor; 14(5):373-377.Farnan, J. M., Paro, J. A., Higa, J. T., Reddy, S. T., Humphrey, H. J., & Arora, V. M. (2009). Commentary: The relationship status of digital media and professionalism: it's complicated. Acad Med, 84(11), 1479-1481. doi: 10.1097/ACM.0b013e3181bb17af
http://dx.doi.org/10.1097/ACM.0b013e3181bb17af

Frohna, J. G., McGregor, R., & Spector, N. (2009). Promoting professionalism in pediatrics. Acad Pediatr, 9(5), 295-297. doi: 10.1016/j.acap.2009.07.001
http://dx.doi.org/10.1016/j.acap.2009.07.001

Fugh-Berman, A., & Ahari, S. (2007). Following the script: how drug reps make friends and influence doctors. PLoS Med, 4(4), e150. doi: 10.1371/journal.pmed.0040150
http://dx.doi.org/10.1371/journal.pmed.0040150

Gawande, A. (2002). Complications: A Surgeon's Notes on an Imperfect Science. New York: Picador.

Hafferty, F. W., & Franks, R. (1994). The hidden curriculum, ethics teaching, and the structure of medical education. Acad Med, 69(11), 861-871.
http://dx.doi.org/10.1097/00001888-199411000-00001

Hendee, W., Bosma, J. L., Bresolin, L. B., Berlin, L., Bryan, R. N., & Gunderman, R. B. (2012). Web modules on professionalism and ethics. J Am Coll Radiol, 9(3), 170-173. doi: 10.1016/j.jacr.2011.11.014
http://dx.doi.org/10.1016/j.jacr.2011.11.014

Kesselheim, J., Garvey, K., Sectish, T., & Vinci, R. (2010). Fostering Humanism and Professionalism in Pediatric Residency Training. www.mededportal.org/publication/7906.20.

Kind, T., Patel, P. D., & Lie, D. A. (2013). Opting in to online professionalism: social media and pediatrics. Pediatrics, 132(5), 792-795. doi: 10.1542/peds.2013-2521
http://dx.doi.org/10.1542/peds.2013-2521

Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). Evaluating training programs [electronic resource] : the four levels / Donald L. Kirkpatrick, James D. Kirkpatrick: San Francisco, CA : Berrett-Koehler, c2006.

Kon, A. A. (2006). Resident-generated versus instructor-generated cases in ethics and professionalism training. Philoso Ethics Humanit Medicine, 1(1),E10. doi: 10.1186/1747-5341-1-10.Kost, A., & Chen, F. M. (2014). Socrates Was Not a Pimp: Changing the Paradigm of Questioning in Medical Education. Acad Med. doi: 10.1097/acm.0000000000000446

Lang, C. W., Smith, P. J., & Ross, L. F. (2009). Ethics and professionalism in the pediatric curriculum: a survey of pediatric program directors. Pediatrics, 124(4), 1143-1151. doi: 10.1542/peds.2009-0658
http://dx.doi.org/10.1542/peds.2009-0658

Liaschenko, J., Oguz, N. Y., & Brunnquell, D. (2006). Critique of the "tragic case" method in ethics education. J Med Ethics, 32(11), 672-677. doi: 10.1136/jme.2005.013060
http://dx.doi.org/10.1136/jme.2005.013060

Marco, C. A., Lu, D. W., Stettner, E., Sokolove, P. E., Ufberg, J. W., & Noeller, T. P. (2011). Ethics curriculum for emergency medicine graduate medical education. J Emerg Med, 40(5), 550-556. doi: 10.1016/j.jemermed.2010.05.076

http://dx.doi.org/10.1016/j.jemermed.2010.05.076

Nickol, D., Brown, D., Collier, D., Margalit, R., Miller, C., Paulman, P., & Woscyna, G. (2012). Small Group Exercise in Professionalism and Code of Ethics Development. www.mededportal.org/publication/9267.

Opel, D. J., & Olson, M. E. (2012). Ethics for the Pediatrician: Bioethics Education and Resources. Pediatrics in Review, 33(8), 370-373. doi: 10.1542/pir.33-8-370
http://dx.doi.org/10.1542/pir.33-8-370

Radwany, S. M., & Adelson, B. H. (1987). The use of literary classics in teaching medical ethics to physicians. JAMA, 257(12), 1629-1631.
http://dx.doi.org/10.1001/jama.1987.03390120091030

Roberts, D. H., Newman, L. R., & Schwartzstein, R. M. (2012). Twelve tips for facilitating Millennials' learning. Med Teach, 34(4), 274-278. doi: 10.3109/0142159X.2011.613498
http://dx.doi.org/10.3109/0142159X.2011.613498

Sandlow, L. J., York, J. W., & Hammett, W. H. (2000). Development of a web-based GME core curriculum. Acad Med, 75(5), 547.
http://dx.doi.org/10.1097/00001888-200005000-00076

Selbst, S. (2003). The difficulty of disclosing medical errors. Contemporary Pediatrics, 20(51).

Starmer, A. J., Spector, N. D., Srivastava, R., Allen, A. D., Landrigan, C. P., Sectish, T. C., & Group, I. P. S. (2012). I-pass, a mnemonic to standardize verbal handoffs. Pediatrics, 129(2), 201-204. doi: 10.1542/peds.2011-2966
http://dx.doi.org/10.1542/peds.2011-2966

Taylor, P. & Keeter, S. (2010). Millenials: confident, connected, open to change. http://www.pewsocialtrends.org/files/2010/10/millennials-confident-connected-open-to-change.pdf.

The College of Physicians and Surgeons of Ontario. (2004). Maintaining boundaries with patients. Members' Dialogue(Sept/Oct), 7-15.

Topol, E. J., & Blumenthal, D. (2005). Physicians and the investment industry. JAMA, 293(21), 2654-2657. doi: 10.1001/jama.293.21.2654
http://dx.doi.org/10.1001/jama.293.21.2654

Transition of care: promoting safe and effective handoffs. (2011). (19th ed.). Alexandria, VA: APDIM Publications.

Wear, D., & Castellani, B. (2000). The development of professionalism: curriculum matters. Acad Med, 75(6), 602-611.
http://dx.doi.org/10.1097/00001888-200006000-00009

Weil, V. (2005). Standards for evaluating proposals to develop ethics curricula. Science and Engineering Ethics, 11(3), 501-507. doi: 10.1007/s11948-005-0020-5
http://dx.doi.org/10.1007/s11948-005-0020-5