

# No Time to Think: Making Room for Reflection in Obstetrics and Gynecology Residency

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## Abstract

**Background** Reflective practice may help physicians identify and connect with what they value and find meaningful in their work. There are many practical obstacles in teaching narrative skills and reflection to residents in surgical subspecialties. We aimed to assess the feasibility of designing and implementing a writing workshop series within an obstetrics and gynecology curriculum.

**Materials and Methods** Between 2008 and 2009, a reflective writing workshop series was introduced into the didactic curriculum of an obstetrics and gynecology residency program. The course included reading fiction and creative writing. Workshops focused on topics residents identified. Residents answered a subjective questionnaire and also completed the Maslach Burnout Inventory and Interpersonal Reactivity Index to assess burnout and empathy.

**Results** Six 1-hour reflective writing workshops took place within the dedicated didactic time for residents. Of the 20 residents in the program, 10 junior residents and 8 senior residents evaluated the workshops. Ten residents participated in more than one workshop, an average of 3.6 workshops. Residents felt that the workshops were enjoyable, and some felt that they influenced their experience of residency, but few felt that it affected their work with patients. Trends in Maslach Burnout Inventory and Interpersonal Reactivity Index scores did not show statistical significance.

**Conclusion** A practical curriculum for introducing reflective practice to obstetrics and gynecology residents is described. This model may be useful to educators looking to incorporate reflective practice into residency curricula and lead to collaborative work that may assess the impact of this work on the experience of residents and their patients.

*Editor's Note: The online version of this article contains stories and selected writing prompts used in this study.*

## Background

During residency, physicians must acquire a broad range of technical, cognitive, and emotional skills to gain professional competence. Reduced work hours and economic and social pressures have focused many residency curricula toward technical and cognitive skills and away from interpersonal skills and self-awareness.<sup>1</sup> Engaging emotionally with patients can be exhausting and daunting. Residency is characterized by long working hours and little time for rest and balance, as well as limited autonomy, all of

which are predisposing factors for burnout.<sup>2</sup> There is substantial evidence that residents suffer from the emotional exhaustion, detached attitude, and reduced sense of personal accomplishment characteristic of burnout.<sup>3</sup> Burnout has been linked with depreciation in empathy that is noted to intensify throughout medical training.<sup>4,5</sup> Beyond the implications for physician well-being, this rise in burnout and fall in empathy may also negatively affect the quality of care that residents provide.<sup>6,7</sup> Some studies have suggested that fostering self-awareness can help physicians identify what is meaningful in their work. Helping doctors connect to their patients and to the rewarding aspects of their work may increase physician satisfaction, thereby reducing burnout and improving the lives of physicians and the care of their patients.<sup>8,9</sup>

Work in narrative medicine suggests that by creating and sharing stories, physicians may enhance their ability to connect with patients and to understand their personal reactions to medical encounters.<sup>10-12</sup> The process of reading stories and writing reflectively with colleagues may teach physicians how to explore the multiple perspectives present in medical encounters and more deeply understand their experiences.<sup>13-16</sup> Reflective practice may help physicians identify and connect with what they value and find meaningful in their work.<sup>17,18</sup> Writing, in particular, is a

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useful tool in understanding complex ideas and the organization of intricate emotional experiences.<sup>19</sup> Resident educators have found that teaching narrative skills and reflection to residents is useful, but most of this work comes from internal medicine, pediatrics, and family medicine, and due to time constraints it has been outside of the scheduled workday in the form of retreats and seminars.<sup>8,11-18</sup>

There is evidence that stress and burnout are especially prevalent among surgical subspecialties, where long hours and the singularity of focus of the surgical work environment place surgeons at risk for overwork and imbalance.<sup>20</sup> Obstetrics and gynecology residents face the rigors of surgical training as well as the emotional pressures of taking care of women as they experience birth, sickness, loss, and death. According to some reports, obstetrics and gynecology residents have among the highest rates of burnout among medical specialties.<sup>21-23</sup> Obstetrician/gynecologists in training must learn to cope with and engage in this work in a way that will allow them to connect meaningfully with their patients and the rewarding aspects of their demanding careers. It is intriguing to wonder whether these residents would benefit from engaging more with their patients' stories, sharing their experiences with colleagues, and becoming more aware of their own reactions.

Introducing obstetrics and gynecology residents to reflective practice requires overcoming many obstacles, from the many competing demands of the 80-hour workweek to overcoming cultural resistance to creative activities that may be perceived as less relevant to residency training. To study whether the tools of narrative medicine are effective in improving resident burnout and empathy, first a model must be created whereby this kind of work can be included in the curriculum in a way that is acceptable to residents and does not interfere with the other aspects of their training. The goal of our study was to evaluate the feasibility of designing and implementing a reflective writing program that fits within an obstetrics and gynecology curriculum, and to create a model that other institutions may follow to include programs for reflective activities in resident curricula.

## Materials and Methods

### Context

From 2008 to 2009, we introduced a reflective writing workshop series into the didactic curriculum of the obstetrics and gynecology residency program at an academic teaching hospital.

### Participants

All of the 20 residents in obstetrics and gynecology, from interns to fourth-year chief residents were scheduled to participate in the workshops during regularly scheduled didactic time. The workshops were led by a writing instructor and a senior resident in obstetrics and

gynecology. The writing instructor was a fiction writer with experience in teaching creative writing and a faculty member in the program in narrative medicine. The project had the support of the residency director, who arranged for the workshops to be incorporated into the didactic curriculum. An educational psychologist helped select evaluation tools and design the initial focus group during which topics for the workshops were selected.

### Materials

The curriculum was designed by the workshop leaders and the educational psychologist and was structured to fit entirely within a 45-minute block of time set aside for didactic activity within the residents' schedule. To tailor the course content to relevant issues for the residents, an introductory session included a structured focus group, during which the residents generated a list of topics they felt were important to them that fell outside of their standard curriculum. Each resident then ranked these topics confidentially, and the top 6 subjects were used as topics for the writing workshops. The following workshops included a shared reading of a short story, followed by discussion and then a reflective writing exercise related to the topic.

The residents completed a questionnaire about their subjective experience of the workshops. The writing was collected anonymously for later review. At the beginning and the end of the year, residents completed the Maslach Burnout Inventory<sup>24</sup> and the Interpersonal Reactivity Index,<sup>25</sup> which are markers of burnout and empathy, respectively. Attendance patterns were also examined.

### Procedures

Didactic time for obstetrics and gynecology residents in our institution occurs on a weekly basis. At approximately 6-week intervals, 1 regularly scheduled lecture was replaced by a writing workshop session. The lectures that the sessions replaced varied between general obstetrics and gynecology topics that comprise the didactic curriculum.

Each of the hour-long workshops followed the same structure. During the first 20 minutes of the workshop, residents read together a short work of fiction and discussed their reactions to the reading. After that, the writing instructor proposed a prompt based on the topic, and the residents wrote for approximately 10 minutes. Residents were then invited to read their writing to the group in a confidential fashion, and they shared their reactions to each other's work. Residents were encouraged to keep the thoughts and writings they shared within the workshops private and not to discuss them outside of the workshop setting.

The midcourse questionnaire was given to the residents after the first 3 workshops. The Maslach Burnout Inventory and the Interpersonal Reactivity Index were completed after the introductory session and after the last session, and outside of the workshops for those residents who were absent from these sessions.

## Analysis

**Qualitative Analysis** Following the third workshop, residents completed a subjective questionnaire on whether they found the workshops enjoyable and a valuable use of time, whether they felt the workshops affected their experience of residency, and whether they felt the workshops influenced their work with patients. They answered these questions on a scale from “not at all” to “very much.” Residents were asked to report what they enjoyed and did not enjoy about the workshops, and whether they found writing difficult. If residents had been absent from workshops, they were asked to give the reason(s).

**Quantitative Analysis** Prior to the workshops, and following completion of the series, residents completed the Maslach Burnout Inventory and the Interpersonal Reactivity Index. Each tool uses a series of questions, with responses in a Likert scale. The Maslach Burnout Inventory divides burnout into 3 parameters: emotional exhaustion, depersonalization, and personal accomplishment. Scores for personal accomplishment are interpreted in an inverse direction to the other 2 parameters. Ranges are given as “low,” “moderate,” and “high” burnout according to each parameter. The Interpersonal Reactivity Index divides empathy into 4 parameters: perspective taking, fantasy scale, empathetic concern, and personal distress. The total for the 4 components is interpreted as a composite empathy score.

The responses of those residents who participated in 1 or fewer workshops (henceforth referred to as “nonparticipants”) were compared to the responses of those residents who participated in 2 or more workshops (“participants”). The trends between the scores at the beginning and the end of the year were compared between the participant/nonparticipant groups and also between junior residents (postgraduate years -1 and -2) and senior residents (postgraduate years -3 and -4). The results were not examined for quantitative trends, because the numbers of participants (residents in the obstetrics and gynecology program) were too small for relevant statistical analysis. Technically, to detect a 20% difference between variables, with 95% confidence intervals,  $P = .05$ , the study would require a sample of 24 participants.

The Columbia University Medical Center Institutional Review Board approved the study. All residents were enrolled in the workshops and participated in an informed consent process. Those residents participating in the study completed the questionnaires and submitted their writing for later analysis. All residents were guaranteed that their writing and discussion would remain confidential outside of the workshops. Residents whose work is included were contacted and gave permission to share their writings to be shared publicly.

## Results

### Feasibility

We designed a curriculum of reflective writing workshops that included six 1-hour-long workshops that took place

## BOX WRITING WORKSHOP CONTENT

*During each workshop, residents read a short story together, and after a brief discussion, they write reflectively based on a writing prompt designed to fit the subject matter. Residents then share and discuss their writing.*

TOPIC: EMOTIONAL ENCOUNTERS

Story: “Fat,” by Raymond Carver

Prompt: Write from the perspective of a patient that moved you.

One resident’s response:

*“My husband is the only man who has seen me naked; until today. I went to the clinic today for my annual exam and I was told my regular doctor was not available; she’s on some “nights” rotation. When I asked who was covering, I was told it was Dr. X. I’d never met Dr. X but assumed she would have to be excellent being that this is Columbia. So, I got undressed, put on the gown, waited for her to enter. 30-minutes later I hear a knock on the door. As the door opened, I heard a man’s voice, and before I could grasp who he was, he introduced himself as Dr. X. I instantly felt extremely naked; my toes were not painted, my legs were not shaven, and I had ugly underwear sitting on top of my clothes on the chair next to the exam table. I also quickly realized that my husband will no longer be the only man to see me naked.”*

TOPIC: LIFE/WORK Balance

Story: “Bullet in the Brain,” by Tobias Wolff

Prompt: Imagine a vision of yourself now or in 5 years—as you might be if you were not a doctor.

One resident’s response:

*“I live in the mountains on the Mediterranean coast of Spain on a vineyard with my significant other. We work on the vineyard and make wine in our winery for a living. We wake up early with sunrise over the ocean to tend the grapes and spend all day under the Mediterranean clear sun. We go for an afternoon swim in the ocean and take a siesta in the late afternoon. At night, we have friends or family over for large delicious dinners. On weekends, we go for sailing trips on the Mediterranean and sleep in the middle of the sea under clear star-filled skies.”*

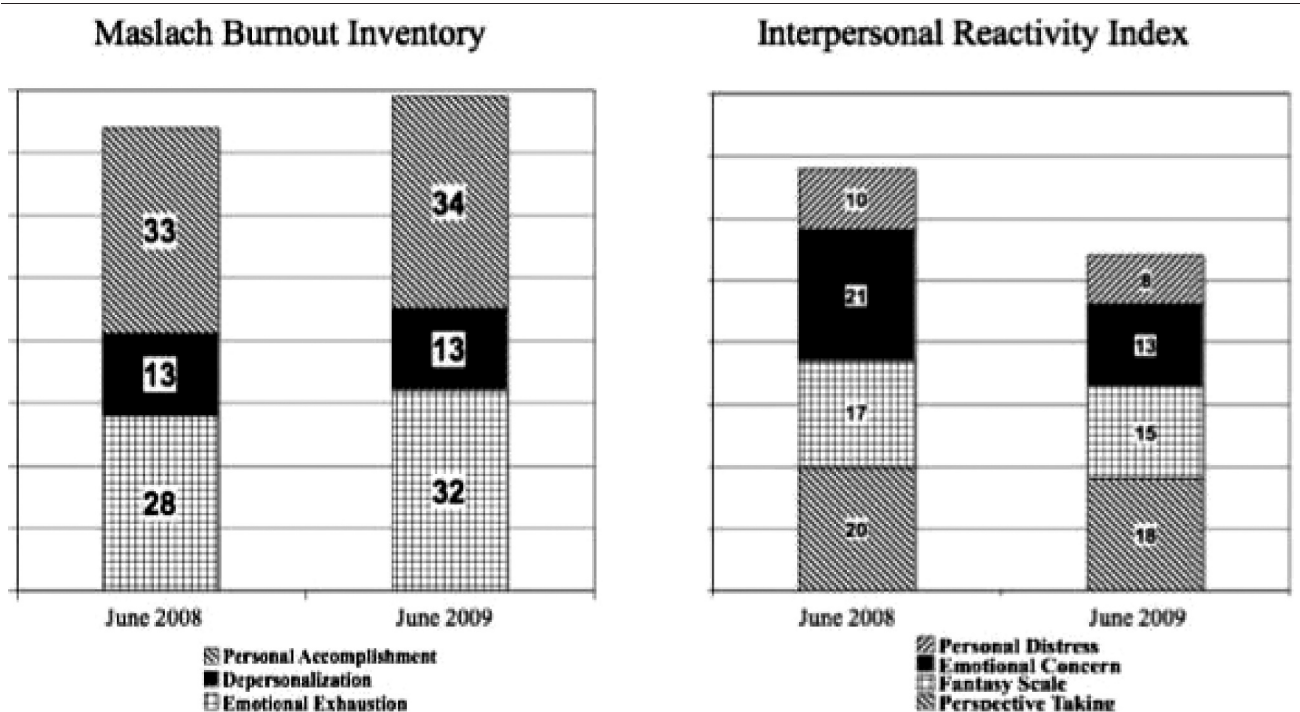
entirely within dedicated didactic time. There were no assigned reading or writing projects outside of the class time, and the program took place during the scheduled workday. The support of the residency program director allowed this program to be incorporated into the existing curriculum. The 6 workshop hours were fitted within the 2-year residency curriculum.

Of 20 residents in the obstetrics and gynecology residency program, 18 participated in the study. One resident was not eligible because of maternity leave during the first half of the study, and the other had a prolonged absence due to illness. There were 10 junior residents and 8 senior residents who participated in the study. On average, there were 6 residents present during each of the workshop sessions. There were 8 residents (nonparticipants) who participated in 1 or fewer workshops, and 10 residents (participants) who participated in 3 to 6 workshops, with an average of 3.6 workshops.

### Qualitative Analysis

The workshop topics the residents selected were: life balance, fatigue/frustration, managing expectations, emotional reactions, fear of causing harm, and team relationships. Each of the workshop sessions was based around a separate topic, and resident writing was focused on the relevant topic (BOX).

Thirteen residents completed the subjective questionnaire about the workshops. Residents from both the participant and non-participant groups completed the evaluation,



**Average scores for 18 residents on Maslach Burnout Inventory and Interpersonal Reactivity Index. As scores on burnout scale increase, markers of empathy decrease. Results not statistically significant.**

FIGURE

BURNOUT AND EMPATHY SCORES AMONG OBSTETRICS AND GYNECOLOGY RESIDENTS

because we wanted to learn about the reactions of those residents who participated in 1 or fewer workshops. Nine residents reported that they enjoyed the workshop “very much,” 2 reported “somewhat” enjoying the workshops, and 1 resident reported “marginal” enjoyment of the workshops. Six residents felt that participation in the workshops had influenced their experience of residency “somewhat,” and 2 felt that it influenced their experience of residency “very much.” Only 2 residents felt that the participation in the workshops had directly influenced their work with patients “very much.” Equal numbers of residents reported finding the writing itself “difficult” and “not difficult.”

Residents were asked to describe what they enjoyed about the workshops. The most common responses were “having time to reflect” (8 of 12), “seeing different perspectives” (5 of 12), and “sharing experiences” (5 of 12). Three residents felt that it was an enjoyable group activity with interesting discussions, and that they felt more calm/clear-headed and satisfied with their daily work. When asked what they did not enjoy, 1 resident said that sharing the writing was difficult. The most common reasons for nonattendance at writing workshops were night rotations (13 of 18), and clinical duties (8 of 18). Only 1 resident cited minimal interest as a reason for nonattendance.

### Quantitative Analysis

Maslach Burnout Inventory scores for all residents were in the moderate to high range at the beginning of the study for each parameter, and Interpersonal Reactivity Index scores between the 2 time points fell (FIGURE). On the burnout scale, the “emotional exhaustion” score was the largest increase, and on the empathy scale, the “emotional concern” showed the greatest drop. When the participant and nonparticipant groups were examined separately, a nonsignificant trend toward preserved empathy and reduced burnout was seen.

### Discussion

Our study suggests that a program in reflective writing can be structured to fit within the obstetrics and gynecology resident curriculum. We propose this model as a useful one for other institutions interested in incorporating narrative training into their residency programs. With the support of the residency program director, and with the assistance of an educational psychologist and a writer with experience in narrative medicine, the course was designed to fit within the existing didactic curriculum. Structuring the workshops around topics that the residents themselves identified



ensured that the topics were of interest to the residents. During each session, there was animated discussion of the story and reflection on each other's work. We found that the workshop design helped the residents to transition into a mindset more prepared for reflection as they read the short story together. After reading the story, the residents frequently made connections to their own experiences and provided a segue into the writing portion of the course themselves. Having each workshop session address a single topic was important because the cohort of residents varied between sessions as rotations took different residents to night shifts and other schedules away from the teaching sessions. The stories and prompts used for the workshop sessions are provided as supplemental materials in the online version of the article (APPENDIX). There were no assignments that carried over between the sessions, so as to reduce the burden of this additional activity in the residents' schedules.

Our qualitative data suggest that these workshops were acceptable to residents and provided them an opportunity to be reflective as well as to think about topics they were interested in exploring. The resident responses indicate that although they found the experience enjoyable, and some felt that it affected their experience of residency, many were not able to make the connection to their work with patients. The residents' enjoyment of these workshops is an important finding, because this indicates that reflective writing workshops might affect resident well-being, which has been an area of increased emphasis by the Accreditation Council for Graduate Medical Education. This indicates a significant area for future study. There has been much work done that shows the benefits of narrative medicine on the experience of the provider, but the important step of measuring patients' experiences has been difficult to examine. Programs in narrative medicine may continue to encounter resistance unless such a connection to patient outcomes can be drawn. In our experience, despite support from inside and outside the department for this project, there is a pervasive sentiment that this type of activity does not merit a substantial commitment of the limited time residents have for education.

This study site had the benefit of rich resources in the area of narrative medicine. Specific faculty members dedicated to teaching reflective practice are certainly not available in every institution. This study also had the fortune to be supported by members of the obstetrics and gynecology department administration. However, we do feel that this study may be replicated by recruiting from the growing number of medical professionals with increasing enthusiasm for projects that bring the humanities into medical education.

On intake, all of the residents in the study had moderate to high burnout scores on each parameter of the Maslach Burnout Inventory. Over the course of the year, these scores trended slightly higher (FIGURE). Emotional exhaustion is

the parameter with the most pronounced rise. Empathy, as measured by the Interpersonal Reactivity Index, fell during this period, with the greatest drop in the area of emotional concern (FIGURE). There is an interesting trend of a higher rise in burnout and greater fall in empathy among nonparticipants compared with workshop nonparticipants, although this trend is not statistically significant. The findings do suggest that there is a need for a project that includes more participants in order to truly assess the impact of participation in reflective writing workshops on the experiences of residents.

This study is limited by its small size, and the findings should be observed in light of unequal and nonrandomized participant and nonparticipant groups. For example, there were more junior residents participating in the workshops than senior residents. The attendance patterns we observed for the writing workshops were similar to attendance at other didactic sessions. Although all residents were instructed to attend the workshops, it is conceivable that resident participation was affected not only by schedule constraints, but also by residents' affinity to reflective and creative work. It would be interesting to look more at those residents who participate in these workshops and those who do not, because the trend toward increased empathy and decreased burnout among the participants might also be accounted for by some predisposing factor not measured here that might be protective of emotional well-being.

Aside from merely addressing the emotional needs of residents, it is possible that narrative methods might be used to teach skills that are not amenable to traditional didactic methods. The Accreditation Council for Graduate Medical Education defines competencies for resident training that include affective skills like "interpersonal and communication skills" and "professionalism" that might be explored effectively with reflective writing workshops.<sup>26</sup> To answer the question of whether reflective and creative activities can be successfully included in resident training programs, and whether that exposure improves resident well-being or affects their patients, a larger, multi-institutional project must be done.

## Conclusion

In this study, we describe the design and implementation of a reflective writing workshop series into an obstetrics and gynecology residency program. The need for attention to problems of physician burnout and empathy is clear, especially among surgical subspecialties where stresses may be intensified by demanding schedules, and there may be more resistance to innovations aimed to promote physician well-being. It is our hope that with this study, a blueprint is drawn that helps other programs find a practical way to incorporate reflective writing workshops into their training programs, leading to collaborative work that helps assess the impact of this work on the experience of residents and their patients.

## References

- 1 Laube DW. Medical education: what's relevant, what's irrelevant and what's missing? *Obst Gynecol*. 2006;108(5):1062–1066.
- 2 Linzer M, Visser MR, Oort FJ, Smets EM, Mcmurray JE, De Haes HC. Predicting and preventing physician burnout: results from the United States and the Netherlands. *Am J Med*. 2001;111:170–175.
- 3 Prins JT, Gazendam-Donofrio SM, Tubben BG, Van der Heijden FM, Van de Weil HB, Hoekstra-Weebers JE. Burnout in medical residents: a review. *Med Educ*. 2007;41:788–800.
- 4 Thomas MR, Dyrbye LN, Huntington JL, et al. How do distress and well-being relate to medical student empathy?: a multicenter study. *J Gen Intern Med*. 2007;22(22):177–183.
- 5 Bellini LM, Shea JA. Mood change and empathy decline persist during three years of internal medicine training. *Acad Med*. 2005;80(2):164–167.
- 6 Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med*. 2002;136(5):358–367.
- 7 West CP, Huschka MM, Novotny PJ, et al. Association of perceived medical errors with resident distress and empathy: a perspective longitudinal study. *JAMA*. 2006;296(9):1071–1078.
- 8 Krasner MS, Epstein RM, Beckman H, et al. Association of an educational program in mindful communication with burnout, empathy and attitudes among primary care physicians. *JAMA*. 2009;301(12):1284–1293.
- 9 Shanafelt TD. Enhancing meaning in work. *JAMA*. 2009;302(12):1338–1340.
- 10 Charon R. Narrative and medicine. *N Engl J Med*. 2004;350(9):862–863.
- 11 Saube SA, Reich D. Using literature to teach behavioral medicine. *Fam Med*. 2006;38(3):159.
- 12 Weisberg M, Duffin J. Evoking the moral imagination. *J Med Humanit*. 1995;16(4):247–263.
- 13 Pennebaker JW. Telling stories: the health benefits of narrative. *Lit Med*. 2000;19(1):3–18.
- 14 Hatem D, Ferrara E. Becoming a doctor: fostering humane caregivers through creative writing. *Patient Educ Couns*. 2001;45:13–22.
- 15 DasGupta S. Reading bodies, writing bodies: self-reflection and cultural criticism in a narrative medicine curriculum. *Lit Med*. 2003;22:241–256.
- 16 Brady DW, Corbie-Smith G, Branch WT. "What's important to you?": the use of narratives to promote self-reflection and to understand the experiences of medical residents. *Ann Intern Med*. 2002;137(3):220–223.
- 17 Epstein RM. Mindful practice. *JAMA*. 1999;282(9):833–839.
- 18 Rabow MW, McPhee SJ. Doctoring to heal: fostering well-being among physicians through personal reflection. *West J Med*. 2001;174(1):66–99.
- 19 Oatley K, Djikic M. Writing as thinking. *Rev Gen Psychol*. 2008;12(1):9–27.
- 20 Balch CM, Freischlag JA, Shanafelt TD. Stress and burnout among surgeons. *Arch Surg*. 2009;144(4):371–376.
- 21 Martini S, Arfken CL, Churchill A, Balon R. Burnout comparison among residents in different medical specialties. *Acad Psychiatry*. 2004;28:240–242.
- 22 Garza JA, Schneider KM, Promecene P, Monga M. Burnout in residency: a statewide study. *South Med J*. 2004;97(12):1171–1173.
- 23 Castelo-Branco C, Figueras F, Eixarch E, et al. Stress symptoms and burnout in obstetric and gynaecology residents. *BJOG*. 2007;114:94–98.
- 24 Maslach C, Hackshon SE, Leiter PM, et al. *Maslach Burnout Inventory*. 3rd ed. Palo Alto, CA: Consulting Psychologists Press. 1996.
- 25 Davis MH. A multidisciplinary approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*. 1980;10:85.
- 26 Accreditation Council for Graduate Medical Education. ACGME Outcome Project. Available at: <http://www.acgme.org/Outcome/>. Cited May 12, 2010.