

# Changes in Themes Over Time from Medical Student Journaling

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## ABSTRACT

*Context:* There has been little exploration of journaling in medical student education.

*Objective:* To document the themes on which medical students reflect during training.

*Design:* We evaluated journals kept by primary care medical students to identify prominent themes and determine change or constancy in themes over time. We looked at third-year medical students participating in a required primary care clerkship in a university-affiliated, community-based family medicine residency program with a rural catchment area.

*Intervention:* During 1994-1996 and 2001-2003, students were asked to keep weekly journals reflecting on their thoughts and feelings regarding "topical content, course processes and methods, and personal reflections on becoming a doctor." Faculty evaluated journals to identify change or constancy in themes over time.

*Results:* Prominent themes included gender issues, professional identity emergence, career choice, and rural practice, the experience of learning, the experience of relating to patients, and the nature of medical practice.

*Conclusions:* We found both constancy and change in student journal themes over time. Changes in journal themes appeared to correlate with outside events and educational trends, including increased attention to reflective practice, changing demographics in medicine and the increasing acceptance of female physicians, and personal life events.

## BACKGROUND

Recent years have seen increasing attention to reflection

in medical practice. Epstein<sup>1</sup> has argued that journaling is one way to facilitate the "mindfulness" necessary for critical self-reflection, Charon<sup>2</sup> has emphasized the important role self-reflection plays in understanding the narrative aspects of medicine, and Stange et al<sup>3</sup> have articulated a framework for understanding medical knowledge that highlights the importance to the clinician of self-knowledge alongside knowledge of diseases, systems, and communities. Published literature on reflective practice has also grown significantly over the past decade: a Medline search on March 27, 2006 found that of 281 citations on "reflective practice," 217 were published since January 1, 1997.

Writing is often cited as a tool for facilitating self-reflection in medicine,<sup>1-8</sup> but the literature on journaling in the education of health professionals focuses primarily on nursing or other allied health professions.<sup>7,9-17</sup> Literature that does explore writing and journaling in the education of physicians includes a description of "video journaling" to help train "community-responsive physicians,"<sup>18</sup> the use of creative-writing courses to focus on both issues of writing and the exploration of personal issues,<sup>6</sup> discussion of a seminar in which students create a "personal illness narrative,"<sup>8</sup> and an exploration of the benefits and weaknesses of journaling in a primary care therapeutics course.<sup>5</sup> An article for practicing clinicians also discusses a number of ways journaling can help physicians "sustain themselves through endless busy days" by writing "a letter to yourself," by processing "daily input," by keeping the "creative juices" flowing, and as a method of "using anger constructively."<sup>19</sup>

Since clerkship experiences often are the first time medical students encounter clinical medicine, we sought to explore the thematic content of medical students' written reflections during clerkship training. Specifically, we sought to document the common themes in journals kept by medical students during a primary care clerkship and to explore any constancy or change in those themes over time.

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## METHODS

We asked third-year medical students participating in a required 8-week primary care clerkship to keep journals each week. Our training site is a university-affiliated, community-based family medicine residency program averaging 5 graduates per year, located in a town of 61,000 with a rural catchment area. Instructions read: "(Your journal) should reflect your thoughts and feelings about topical content, your experience of course processes and methods, and your personal reflections on becoming a doctor." Students were informed that participation would have no effect on grades, and that the course director would have no access to students' journals until after final course grades had been assigned.

Each week during each clerkship, the faculty psychologist responsible for teaching communication collected and read the journals. The journals were returned to students with reflective comments designed to reinforce reflection through thought-provoking questions. Copies of the journals with identifying information removed were retained for analysis. Approximately 4-6 students were involved in each 8-week rotation, and we asked all students in the clerkship rotations from 1994-1996 and 2001-2003 to participate. A faculty shortage during 1997-2000 led to interruption of the journaling project, however this also created 2 distinct periods of data collection and allowed for comparison and contrast of themes between 2 different time periods.

We analyzed the journals for thematic content using a modified immersion-crystallization process.<sup>20,21</sup> The 3 authors read all of the journals that had been submitted with instructions to highlight any passages that "emerge as significant." Following the initial reading, we met to review the journals and identify through consensus common themes among the passages they had individually marked.

Our institutional review board designated this project "exempt", and we obtained students' permission to use anonymous excerpts for publication.

## RESULTS

All students in the 8-week clerkship rotations from 1994-1996 (approximately 25 students total) and 2001-2003 (approximately 35 students total) voluntarily participated. We analyzed journals from the first set of students at the end of data collection in 1996, and those from the second set of students in 2004. After identifying common themes within each group of journals (1994-1996 and 2001-2003), we compared themes identified in each time period to document continuity or contrast in journal themes between the 2 time periods.

We found that prominent journaling themes among the 1994-1996 students included gender issues, professional identity emergence, career choice, and rural practice, while prominent themes among the 2001-2003 students included the experience of learning, the experience of relating to patients, and the nature of medical practice. Table 1 lists the themes identified, along with illustrative examples.

## DISCUSSION

We noted both continuity and change when comparing the themes found in students' journals between the 2 time periods (1994-1996 and 2001-2003). Students in both groups wrote about the differences between specialist medicine and primary care medicine, usually describing those differences in relation to their own interests and self-perceptions.

Plack et al<sup>7</sup> report that the content of physical therapy students' journals included "professional knowledge and skills," and we found that both groups of medical students dealt with the theme of professional identity emergence. However, while this was a distinct theme for the first group as they wrote about their experiences learning the tasks of becoming a physician, the second group wrote much more about the ways experiences affected their self-perceptions and sense of developing professional identity. This shift is consistent with movement from reflection that simply "returns to experience" to higher-stage reflection that "attends to feelings" and "re-evaluates" (using the taxonomy described by Plack et al<sup>7</sup>), and this move to higher-stage reflection may reflect growing emphasis on reflective practice in medicine.

While the first group of students made definite note of gender issues in their clinical experiences (eg, female students being mistaken for nurses), this was not a significant theme for the second group. The previous 25 years had seen a relative increase in the numbers of women completing medical training compared to men.<sup>22</sup> This national change appears to have been demonstrated locally through an increased acceptance of female physicians. Apparently, as more female physicians have joined the workforce, our local population has become much more accustomed to and accepting of female physicians, and physician gender has become less of an issue for both patients and staff.

Separate from the themes we identified, we also noted periodic and often quite personal reflections by the students on the impact of outside events on their education. One clerkship was in progress at the time of the 9/11 attacks, and several students wrote of the

**Table 1. Medical Student Journal Themes**

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**1994-1996**

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**Gender Issues**

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"It is funny how many times I have been mistaken for a nurse the last few weeks."

"I arrived at the center at 1:20 and checked in at the front desk. They quickly ushered me to the nursing station – they mistook me for a nursing student."

**Professional Identity Emergence**

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"I also felt more a part of the health care team today."

"It scared me to death the first time I did a pelvic exam on a young woman who had never had one before."

**Career Choice—Primary Care versus Hospital Based**

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"Today we saw a man who'd been seen by several specialists for the new onset of headaches. Ironically, it was Dr. W, his generalist, who diagnosed him with chronic subdural hematoma and arranged the neurosurgery for tonight. He knew the patient well enough to know that when he finally comes in for a complaint, it's something serious. It's nice to see the trusting relationship ..."

"I know that internal medicine is definitely not for me. I need to do more for the patient. I think that internists do most of their work by just listening to the patient's complaints and validating the fact that their complaints are legitimate (even if there is nothing that can be done for them)."

"I also have some musings on family practice. I have always thought of general practice fields as being very hard. Such a variety of patients, such a wide differential base. How could one ever stay current on everything? I thought only the very smartest of the smartest, maybe the top 1% of medical students could be truly good at it. Why does the top of the class go into surgery? It makes no sense. Surgery is basic, visual, and easy!!! ... Regardless, I have learned that it is not impossible to be a good family physician ... I might even be able to do family practice well."

**Rural Practice**

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"In general, I feel that out-of-town rotations have allowed me to think more critically about what is really important to me in medicine and what I really want to focus my career efforts on. In a sense, it seems that away from the university setting, one is more immune from the pressures and biases toward academia and an academic subspecialist type practice."

"The cows come before everything always. Understand that, and you'll never be surprised by your patients' (sic) who are farmers."

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**2001-2003**

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**The Experience of Learning**

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"I really like the idea of a diabetes simulation. I feel like it will offer me a better understanding of what patients are going through."

"I'm somewhat scared and excited at the same time that I may actually be developing 'medical instincts.' Maybe I really will be a doctor someday after all."

"When there's a national crisis going on, expect some elevated BPs."

"It was exciting to see/consider the possibility of Ehrlichiosis—our infection and immunity professors will be thrilled—'it sounds obscure, but you WILL see this in Northern Wisconsin'."

"A lot of interactions and role-playing occur daily in the clinical setting. To the doctor, I'm the apprentice. To the nurses, I'm a nebulous embryonic form of a doctor whose abilities and responsibilities are rather vague."

**The Experience of Relating to Patients**

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"At what point does the death of a patient not bother a doctor?"

"It's easy for physicians to forget the power that their recommendation holds for a patient's treatment. It's also easy for physicians to assume that their expectations of patients (sic) wishes are correct without really probing to find out."

"Whatever I think is good for someone, even if I'm armed with scientific evidence that it may prolong life or improve someone's subjective quality of life, may not be desired by that person, and ultimately personal freedom takes precedence over following prescribed health practices."

"When I have my own practice I hope I'll be able to take enough time with patients to really feel like I'm getting to know them as more than just a list of medical problems."

"In some ways I am angry when I see patients who are there to have their pain medicated... I have to force myself to feel empathy... I remind myself of their probable suffering that incites them to seek relief in drugs and realize that they need help more than anyone else."

**Nature of Medical Practice**

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"I wish they were preparing us a little more in medical school to work with teams and interact more with the people who are actually doing most of the patient care."

"I get the sense from my preceptor that much of primary care entails deciding what NOT to do—what parts of the physical exam can be safely skipped, how abbreviated the history-taking can be, and this bothers me, because at this point I'm worried about missing things and get worried if I'm not thorough enough."

"Maybe their practices are altered by pharmaceutical freebies and maybe they're not, but I think it's wrong to project the IMAGE of being influenced."

impact that event had on them and on their patients. One student wrote of a parent's colonoscopy, reflecting on the tensions of being both a medical professional and a son, while another student wrote of the impact a local murder had on self and on the clinic staff, and another student recorded the emotional impact of domestic violence on the preceptor's office staff. Thus, our students' journals also provided basic documentation of students relating their professional training to the larger spheres of personal and public life beyond medicine.

Limitations potentially affecting this study include: (1) the use of a small convenience sample of subjects, (2) the fact that students may have consciously or unconsciously adjusted their writings based on the knowledge that these journals would be read by faculty, (3) the potential effect of faculty reflective responses to students' journal writings, (4) the fact that student interest in journaling may have directly affected how much an individual student engaged in this exercise as opposed to another type of reflection that they may have found more natural, and (5) since our clerkship site may attract students who are more interested in rural or small town, and perhaps non-academic, primary care practices, the themes we found in student journals may have differed in unknown ways from journal themes of students in urban or academic primary care clerkships.

Nevertheless, this initial qualitative project demonstrates both constancy in the themes on which students reflect during medical training, as well evidence to suggest the impact of outside trends and events on the educational experiences of medical students: increased attention to reflective practice in medicine appears to have impacted students' journaling, changing demographics appear to have made gender less of a "front-burner" issue for trainees, and trainees continue to relate their medical training to events in other spheres of both public and private life.

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