

Words and Wards: A Model of Reflective Writing and Its Uses in Medical Education

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Abstract Personal, creative writing as a process for reflection on patient care and socialization into medicine (“reflective writing”) has important potential uses in educating medical students and residents. Based on the authors’ experiences with a range of writing activities in academic medical settings, this article sets forth a conceptual model for considering the processes and effects of such writing. The first phase (writing) is individual and solitary, consisting of personal reflection and creation. Here, introspection and imagination guide learners from loss of certainty to reclaiming a personal voice; identifying the patient’s voice; acknowledging simultaneously valid yet often conflicting perspectives; and recognizing and responding to the range of emotions triggered in patient care. The next phase (small-group reading and discussion) is public and communal, where sharing one’s writing results in acknowledging vulnerability, risk-taking, and self-disclosure. Listening to others’ writing becomes an exercise in mindfulness and presence, including witnessing suffering and confusion experienced by others. Specific pedagogical goals in three arenas—professional development, patient care and practitioner well-being—are linked to the writing/reading/listening process. The intent of presenting this model is to help frame future intellectual inquiry and investigation into this innovative pedagogical modality.

Keywords Writing · Creative writing · Professionalism · Medical education · Reflective practice

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There is renewed interest among medical educators in pedagogical tools to help physicians-in-training develop professionalism, including core humanistic values, high ethical and moral standards, the ability to deal with complexity and uncertainty, and respect for self and others.^{1,2} Some educators speculate that, properly used, reflective writing might be one way of promoting these aspects of medical professionalism.^{3,4,5,6} Physician-ethicist Edmund Pellegrino suggests that writing can be a hands-on, experiential method for expanding physician awareness of the meaning of illness and of doctoring.⁷ Nevertheless, little data exist about the effects on and value of writing for medical learners. Therefore, we feel that theorizing about the relationships between writing and medical professionalism is an important first step toward analyzing effective outcomes. The purpose of this paper is to present a theoretical framework to consider the functions and effects of reflective writing experiences for physicians-in-training.

Through preliminary discussions and subsequent critical analysis, the authors examined several reflective writing classes, course components, workshops, and exercises that occurred over a period of five years at three different medical schools. These included required and elective experiences targeting pre- and clinical medical students, as well as residents. The writing experiences themselves ranged from one-time events to multiple, progressive assignments. Writing samples produced included poetry, short stories, skits, and critical incident essays.⁸ Interdisciplinary teams consisting of a physician (variously anesthesiologist, family physician, or internist) and a non-physician (literature professor, psychologist, or ethicist) facilitated the writing activities. Learners were given wide latitude in terms of instructions and assignments. Generally they were encouraged to create original work addressing difficult or meaningful experiences with patients, colleagues, or teachers. In some instances, they could respond to writing exercise assignments or address a topic of choice. Usually the act of writing was followed by group sharing of written work and reflection upon the experience of writing from the learners' perspective.

From this work, we developed a conceptual model (Fig. 1) to theorize what happens when medical students engage in reflective writing. Our methodology integrated field notes on group process, comments of learners during group reflection, the written products themselves, and a review of relevant literature. Although many of the stages of the writing/reading/listening process have been identified by other scholars, our contribution here is to integrate them into a theoretically meaningful whole. The purpose of our exercise is to use this model to identify discrete processes and relationships that can be scrutinized empirically in future studies.

¹ Association of American Medical Colleges. "Contemporary Issues in Medicine, Medical Informatics, and Population Health: Report II of the Medical School Objectives Project," 130–141.

² Swick, "Toward a Normative Definition of Medical Professionalism," 612–616.

³ Poirier, Ahrens and Brauner, "Songs of Innocence and Experience: Students' Poems about Their Medical Education," 473–478.

⁴ Charon, "The Patient-Physician Relationship: Narrative Medicine: A Model for Empathy, Reflection, Profession, and Trust," 1897–1898.

⁵ Henderson, "Medical Student Elegies: The Poetics of Caring," 128–129.

⁶ DasGupta and Charon, "Personal Illness Narratives: Using Reflective Writing to Teach Empathy," 351–356.

⁷ Pellegrino, "To Look Feelingly: The Affinities of Medicine and Literature," 19–23.

⁸ Branch et al., "Becoming a Doctor: Critical-Incident Reports from Third-Year Medical Students," 1130–1132.

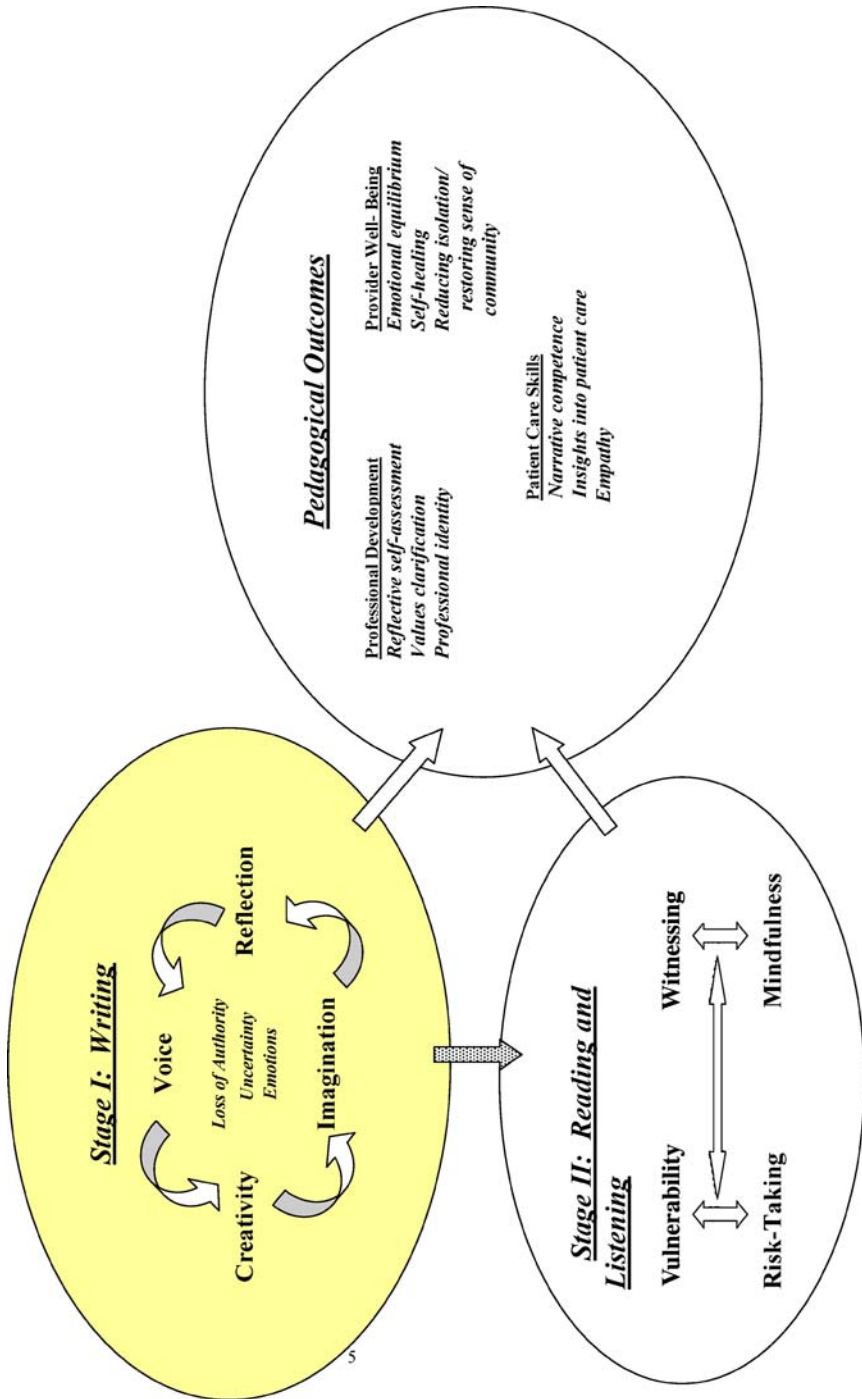


Fig. 1 A model of Reflective Writing\Listening and their Relationship to Three Pedagogical Domains

Phase I -Writing

By its nature, writing is a solitary act. Even when part of a group exercise, each individual must retreat into herself, contemplate events, and give free rein to imagining their various meanings. What actually happens when medical learners engage in the writing process? What are key steps in the process that can help us conceptualize how learners might change as a result of the experience of writing?

Loss of authority and certainty

As part of their socialization process, medical students learn specialized vocabularies, prescribed cognitive frameworks, and routine patterns of action that value authority and certainty. Reflective writing requires learners to break free from familiar orienting points typically relied upon to interpret and make sense of medical events, and approach these same events in new, sometimes foreign ways.⁹ Through writing, learners think about other people's situations, including patients,⁷ and contemplate their own reactions in relation to those situations from a subjective, personal, and indefinite vantage point.

Reflection

After permitting a state of questioning and uncertainty, writing encourages learners to adopt a reflective stance, in order to successfully answer questions such as “What happened in that encounter?” or “Why does this patient aggravate me?” In the process of writing, learners can step back from the immediate obligations and pressures of training in order to pause and consider the big picture. As one scholar notes, “Writing slows down the whirlwind of medical education and allows students to make sense of their experience on their own terms.”¹⁰

Imagination and creativity

Medical education is still by-and-large rooted in the positivist-empiricist model of knowledge. This view requires methods of analysis that are precise, logical, and systematic. By fulfilling a writing assignment, learners often discover or recover dimensions of imaginative thinking and creative problem-solving.¹¹ In this kind of writing, which taps into what Naomi Goldberg calls the “wild mind,”¹² students are encouraged to express themselves metaphorically and symbolically.

Voice

Transition from lay-person to physician requires one to assume new attitudes and even values. Writing enables medical trainees to develop original perspectives which may contrast with the biophysical model underpinning much of their training. In the process, learners can acknowledge and retrieve aspects of self and personality that have been lost or suppressed

⁹Henderson, 120–121.

¹⁰Reifler, “Poor Yorick: Reflections on Gross Anatomy,” 327–332

¹¹Spatz and Welch, “Literature and Medicine as a Writing Course,” 141–150.

¹²Goldberg, *Wild Mind: Living the Writer's Life*, 31–33.

during their socialization into medicine.^{13,14} When learners are able to reclaim their own voice through writing, they become more confident about exploring the voices of patients, patients' family members, and others. Awareness of the existence of multiple, conflicting voices helps physicians realize that many different perspectives may exist in any given situation.

Emotion

One of the unique aspects of reflective writing, in contrast to more didactic forms of medical communication such as the case report or formal charting, is that it allows students to infuse their words with emotion. At some point, the professional language and knowledge that students struggle to master fall short in helping to resolve the psychological and spiritual dimensions of many clinical dilemmas.¹⁵ Students discover that writing is a way to speak from the emotional interior of their experience.¹⁶ Rather than attempting to ignore or set aside emotional reactions as unprofessional,¹⁷ writing gives students a chance to examine their emotions fully, experiment with different ways of expressing emotions, and explore various meanings.

Phase II: Reading and listening

In the curricula we considered, personal writing was only the first phase of the process. We also asked learners to participate in small group sharing and discussion of their writing. In these sessions, we counseled learners to choose a level of self-disclosure that was not excessively embarrassing or painful. However, we simultaneously encouraged them to take some personal risks in exploring their attitudes and feelings. Ground rules which enhanced learner feelings of safety included the voluntary nature of sharing, explicit confidentiality of all stories heard, and receptive, supportive listening.

Vulnerability and risk-taking

Learners frequently refer to feelings of vulnerability in connection with sharing personal writing in a group setting. Although most of the learners in our groups have known each other over some period of time, and often work side by side in intense situations, medical training rarely encourages students to reveal private emotions, thoughts, or opinions. Hence, the writing and sharing exercise is frequently uncomfortable. Yet when learners participate in group sharing, an interesting paradox occurs. They often report that by sharing their vulnerability, they feel less vulnerable and more known. A common statement from our learners is that they often see their classmates' conflicts in a new light after listening to the written stories, although they had previously heard them presented, in social settings or

¹³Lu, "Why It Was Hard For Me to Learn Compassion As a Third Year Medical Student," 457–458.

¹⁴Kaiser, "Fixing Identity by Denying Uniqueness: An Analysis of Professional Identity in Medicine," 95–105.

¹⁵Stein, "Ways of Knowing in Medicine: Seeing and Beyond," 29–36.

¹⁶Campo, *The Healing Art: A Doctor's Black Bag of Poetry*, 25.

¹⁷Smith and Stein, "A Topographical Model of Clinical Decision Making and Interviewing," 361–363.

formal teaching rounds. Such moments encourage deeper camaraderie and closeness among classmates.

Mindfulness

In a seminal article, Epstein¹⁸ argues that physicians should learn to be “fully present” with patients by developing mindful attention that excludes thoughts of past problems or future obligations. Mindfulness is hypothesized to increase accurate and empathic listening and observation. Students who participate in group sharing of writing discover that the act of listening to their peers takes on similar qualities. They listen to experiences and disclosures of their classmates respectfully and non-judgmentally with awareness, responsiveness, and alertness.

Witnessing

Sometimes the act of being fully present during sharing of reflective writing reaches an even higher plane which we term witnessing. This concept¹⁹ refers to the responsibility of those who hear testimony of suffering not to turn away from the struggles presented, but rather to accept and acknowledge them at a deeply empathic level. Listening to the writing of colleagues affords learners a chance to sympathetically release their own helplessness and fears. Exposing learners to this position of reciprocity and equality offers them an alternative to the normally perceived role of physicians as unilateral and hierarchical.

Pedagogical outcomes

Our model needs to be able to conceptually link the reflective process of writing/reading/listening to potential pedagogical outcomes, both positive and negative. We hypothesize that there may be a “transfer effect” where skills practiced in these sessions generalize to other aspects of doctoring. For example, reflection used in personal writing about patients may extend to interactions with other patients; or the mindfulness stimulated in small group reading and listening sessions may also be used for astute awareness in patient care. We have identified three domains in which we believe these links are likely to occur: professional development, patient care skills, and provider well-being.

Professional development

The concept of lifelong growth and self-improvement is deeply rooted in the profession of medicine.²⁰ Skills which foster professional growth include: ongoing engagement in *reflective self-assessment*, *values clarification*, and *professional identity formation*. We believe writing and peer sharing of writing has implications for each of these areas.

¹⁸Epstein, “Mindful Practice,” 833–839.

¹⁹Frank. *The Wounded Storyteller: Body, Illness, and Ethics*.

²⁰Frankford et al. “Transforming Practice Organizations to Foster Lifelong Learning and Commitment to Medical Professionalism,” 708–717.

Reflective self-assessment

Some educators call for approaching medicine as a “reflective practice,” in which learners are trained to examine the process of patient care itself and the physician in relation to the patient via recursive cognitive and affective loops.^{21,22,23,24} Writing offers one method for reflecting on clinical events. Non-formulaic writing is by definition a reflective act and requires critical examination of self and others. We surmise that writing, particularly if combined with a facilitated discussion, can be empirically demonstrated to be a useful tool to advance this end. However, one recent study²⁵ found that students addressed significantly *fewer* issues of professionalism when writing critical incidents reports than when learners engaged in reflective interviews with faculty. The most efficient and effective way of pursuing this outcome remains to be tested.

Values clarification

Over the course of training, each student-physician must learn to gain moral agency over her own actions. Students are exposed to and grapple with many conflicting and competing values and interests. Writing starts from a position of uncertainty and attends to multiple voices. Writing one’s own story, listening to and being heard by peers, can help learners clarify values and rediscover their own moral compasses.²⁶ It is also true that writing in a medical context can run the risk of being morally exploitative of patients²⁷ and students.^{28,29} Systematic investigation is needed to establish the utility of reflective writing to refine students’ personal values as well as to clarify techniques that avoid ethically harmful pitfalls.

Professional identity

Core competencies delineated by the American College of Graduate Medical Education (<http://www.acgme.org/outcome/comp/compMin.asp>) call upon physicians to learn iterative processes aimed at developing, challenging, and re-directing their evolving skills and professional identity. When learners engage in an exercise that connects them with their own voices and allows them to hear the voices of others within a community of peers, they are in effect defining and refining their professional identities.³⁰ Writing thus may help “immunize”

²¹ Shapiro and Talbot, “Applying the Concept of the Reflective Practitioner to Understanding and Teaching Family Medicine,” 450–456.

²² Novack et al., “Calibrating the Physician: Physician Personal Awareness and Effective Patient Care,” 502–509.

²³ Branch et al., “Small-Group Teaching Emphasizing Reflection Can Positively Influence Medical Students’ Values,” 1171–1172.

²⁴ Fins et al., “Reflective Practice and Palliative Care Education: A Clerkship Responds to the Informal and Hidden Curricula,” 307–312.

²⁵ Baernstein et al., “Promoting Reflection on Professionalism: A Comparison Trial of Educational Interventions for Medical Students,” 742–747.

²⁶ Swenson and Rothstein, “Navigating the Wards: Teaching Medical Students to Use Their Moral Compasses,” 591–594.

²⁷ King and Stanford, “Patient Stories, Doctor Stories, and True Stories: A Cautionary Reading,” 185–199.

²⁸ Berman, *Diaries to an English Professor: Pain and Growth in the Classroom*, 1–2, 29, 31–33.

²⁹ Markel, “Medicine and the Arts,” 48.

³⁰ Hatem and Ferrara, “Becoming a Doctor: Fostering Humane Caregivers through Creative Writing,” 13–22.

learners against what Coulehan and Williams have called the tacit indoctrination of medical training into detachment, self-interest, and unfeeling objectivity.³¹ Through writing, students may be able to explore preferred professional identities by embracing their own values and emotions while challenging what strikes them as problematic or untrustworthy about the normative world of medicine.^{32,33}

Patient care

We provide three dimensions of patient care that might be influenced by the writing process: *narrative competence*, *empathy*, and *insights into the process of patient care itself*.

Narrative competence

Charon has emphasized the importance of what she calls narrative competence in patient care.³⁴ This entails the ability to pay close attention to the form and plot of the patient's story, read and imaginatively interpret that story, identify differing perspectives and recognize contradictions and ambiguities in the story's multiple versions, and finally, appreciate the coherence and unique meaning of each patient's life story.^{35,36} We posit that writing builds skills in narrative competence, in part through its attention to voice, language, perspective, and emotion; and in part through the attitude of mindfulness created in listening/reading sessions. However, in the narrator's desire to weave a "good," coherent story, distortions and deceptions about real life experiences may occur.^{37,38} Further research will need to investigate whether writing promotes narrative competence, whether better patient care ensues, and whether or not the urge to "tell a good story" distorts actual clinical experience in harmful ways.

Empathy

It is generally recognized that to effectively care for patients, physicians needs empathy for the patient's situation and lived experience.^{39,40} Paradoxically, both anecdotal reports and research studies point to negative shifts in student attitudes toward patients between the preclinical and clinical years^{41,42} and similar disturbing trends among residents toward

³¹ Coulehan and Williams, "Vanquishing Virtue: The Impact of Medical Education," 598–605.

³² Anderson, "Forty Acres of Cotton Waiting to be Picked: Medical Students, Storytelling, and the Rhetoric of Healing," 280–297.

³³ Good and DelVecchio-Good, "'Fiction' and 'Historicity' in Doctors' Stories: Social and Narrative Dimensions of Learning Medicine," 50–69.

³⁴ Charon, "Narrative & Medicine," 862.

³⁵ Charon, "Patient-Physician Relationship," 1897–1899.

³⁶ Charon, "Narrative & Medicine," 862–863.

³⁷ Garro and Mattingly, "Narrative Turns," 264–266.

³⁸ Mattingly, "Emergent Narratives," 183–188.

³⁹ Gianakos D. "Empathy Revisited," 135–136.

⁴⁰ Markakis et al. "The Path to Professionalism: Cultivating Humanistic Values and Attitudes in Residency Training," 141–150.

⁴¹ Lu, 457.

⁴² Prislín et al, "Assessing the Acquisition of Core Clinical Skills Through the Use of Serial Standardized Patient Assessments," 480–483.

further cynicism and distancing strategies as training progresses.^{43,44} In this area, we have preliminary qualitative evidence that writing appears to provide learners with a mechanism for cultivating empathy toward patients, at least by their own self-report.⁴⁵ Point-of-view writing assignments, for example, demand that learners adopt the voice and viewpoint of the patient, which both moves them emotionally closer to and promotes understanding of initially unsympathetic characters.⁴⁶

We theorize there are active relationships between all steps of the writing/reading/listening process and the enhancement of empathy. For example, learners' uncertainty might promote a willingness to "not-know" and to hold off on making assumptions about patients' perspectives and feelings. Reflection might be used to formulate the question, "How *do* patients feel about their illnesses?" By cultivating sensitivity to multiple, simultaneously existing voices, students may also acquire greater capacity to recognize and hear *patients'* voices and to differentiate their own voices from those of patients and family members. The vulnerability that students often feel in sharing their writing may stimulate their ability to recognize and empathize with patients' vulnerabilities. Mindfulness, which brings clear-sightedness and closer attention to the present moment, may yielding more empathic understanding of a variety of patients' situations. Developing an aptitude for witnessing during reading/listening sessions may also prevent students from turning away from the suffering of their patients.

Yet it is also true that, while writing may enhance empathy, it runs the risk of co-opting the patient's voice, so that instead of true empathy, the doctor offers the patient a story altered to suit his or her own purposes.^{47,48,49,50} In this interpretation, what is created through writing is not empathy, but the illusion of empathy. Research needs to examine whether students trained in writing are more effective than other students in making the patient feel seen, heard, and understood.

Insights into patient care

Medical students sometimes drift toward using algorithmic, cookbook approaches to patient care. Reliance on such techniques often leaves students unprepared for the unpredictability of problem solving in actual clinical practice, where non-textbook patient problems regularly arise and answers can be vague or unknown. We speculate that the imaginative and reflective perspectives achieved in writing may have the ability to produce novel ways of solving patient care dilemmas. At a minimum, this approach can lead to new, more satisfying, possibilities for interacting with and managing these complex patients.^{51,52,53}

⁴³Wipf et al, "Turning Interns into Senior Residents: Preparing Residents for Their Teaching and Leadership Roles," 591.

⁴⁴Testerman et al, "The Natural History of Cynicism in Physicians," 843–845.

⁴⁵Rucker and Shapiro, "Becoming a Physician: Students' Creative Projects in a Third-Year IM Clerkship," 391–397.

⁴⁶Squier, "Teaching Humanities in the Undergraduate Medical Curriculum. In *Narrative Based Medicine: Dialogue and Discourse in Clinical Practice*, 128–139.

⁴⁷King and Stanford, "Patient Stories, Doctor Stories, and True Stories: A Cautionary Reading," 185–199.

⁴⁸Hardwig, "Autobiography, Biography, and Narrative Ethics," 50–64.

⁴⁹Garro and Mattingly, 266–7.

⁵⁰Mattingly, 187.

⁵¹Shafer and Fish. "A Call for Narrative: The Patient's Story and Anesthesia Training," 124–42.

⁵²Charon. "Reading, Writing. . . ," 286–87.

⁵³Warnock. "Language and Literature as Equipment for Living: Revision as a Life Skill," 34–57.

Physician well-being

The well-being of physicians and medical students is a topic that has received much attention in the professional literature.^{54,55,56} Higher than average rates of suicide, unhappy marriages, and substance abuse define physicians as a population at risk. We believe that reflective writing may be one tool in a multi-modal arsenal aimed at protecting and promoting physician mental and physical health. We have identified the following three characteristics of well-being as likely to be positively affected by writing: *emotional equilibrium*, *self-healing*, and *building community/reducing isolation*.

Emotional equilibrium

The art of medicine requires a double movement of simultaneously distancing oneself from, and putting oneself in, someone else's position.⁵⁷ In the felicitous phrase coined by Jack Coulehan,⁵⁸ physicians must cultivate both *emotional steadiness*, the ability not to be overwhelmed by the patient's suffering, and *emotional tenderness*, the capacity always to be moved by that same suffering. Achieving symmetry between steadiness and tenderness is difficult to achieve, yet essential to good doctoring. Writing offers students a space to become familiar with their emotions and the emotions of others, while also encouraging them to reflect on and develop a certain equanimity regarding these emotions. Practicing this balance in writing may facilitate students' developing a similar emotional stability in patient care.

Self-healing

It has been asserted that writing may promote psychological and even physical healing. The provocative research of James Pennebaker and colleagues suggests that writing about a traumatic or stressful event may exert a therapeutic influence on the writer.^{59,60} These effects have been demonstrated in patients with chronic illness,⁶¹ as well as unemployed adults and college students.⁶²

In the context of medical education, learners frequently use writing to examine difficult feelings of inadequacy, grief, rage, and despair (sometimes referred to as the "uninvited guests" in training).⁶³ After reflective writing and listening, learners comment that pre-

⁵⁴ Shearer and Toedt, "Family Physicians' Observations of Their Practice, Well Being and Health Care in the United States," 751–756.

⁵⁵ Park and Adler, "Coping Style as a Predictor of Health and Well-Being Across the First Year of Medical School," 627–631.

⁵⁶ Riley, "Understanding the Stresses and Strains of Being a Doctor," 350–353.

⁵⁷ Weisberg and Duffin, "Evoking the Moral Imagination: Using Stories to Teach Ethics and Professionalism to Nursing, Medical and Law Students," 247–263.

⁵⁸ Coulehan, "Tenderness and Steadiness: Emotions in Medical Practice," *Literature and Medicine* 14 (1995): 222–236.

⁵⁹ Esterling et al., "Empirical Foundations for Writing in Prevention and Psychotherapy: Mental and Physical Outcomes," 92–94.

⁶⁰ Pennebaker, "Telling Stories: The Health Benefits of Narrative," 1243.

⁶¹ Smyth et al., "Effects of Writing about Stressful Experiences on Symptom Reduction in Patients with Asthma or Rheumatoid Arthritis," 1304–1309.

⁶² Pennebaker, 1245.

⁶³ Epstein, "Uninvited Guests in the Doctor-Patient Relationship" Psychiatry Grand Rounds.

viously suppressed anxiety and fears recede. Writing about stresses, traumas, and ethical dilemmas has the potential to allow students and residents to construct coherent stories out of previously chaotic emotions. Nevertheless, personal writing has also been accused of being self-indulgent and excessively self-focused.⁶⁴ Future research will have to inquire whether the healing or the whining function of writing predominates.

Reducing isolation and restoring sense of community

The intense commitment required of physicians-in-training can result in isolation from friends and family members.^{65,66} After sharing their writing experiences, learners often discover that their reactions of distress, burn-out, and being overwhelmed are normative, resulting in stronger feelings of connection with their peers. Interestingly, in the minds of some students, the act of writing itself links them to an imagined community of other physician- and patient-writers. Thus, for some who engage in reflective writing, a sense of community materializes that encompasses not only particular students or residents, but extends more broadly to include fellow writers, as well as their intended audience of healers and sufferers.

Conclusions

The model presented above represents only a preliminary step in exploring the potential value of introducing reflective writing to medical education settings. Ultimately, the pedagogical impact of this model has to be systematically assessed. Research assessing student performance pre and post reflective writing curricular initiatives is feasible, but such studies are difficult to design and implement because of limitations in such factors as pre-existing personality traits, consent procedures, randomization, identification of appropriate control groups, and relevant measures.⁶⁷ One can imagine studies in which students are randomly assigned to a reflective writing condition, and then compared by both qualitative and quantitative methods to peer controls on dimensions such as empathy, self-awareness, insight and compassion.⁶⁸

Downie⁶⁹ has categorized possible outcomes of humanities-based interventions as transferable skills, humanistic perspective, situational coping, self-awareness, and joint investigation, but admits that measuring such outcomes poses formidable, although not impossible challenges. Nevertheless, the writing/reading/listening model can make useful contributions to these hard-to-teach clinical dimensions,⁷⁰ and hence deserves further study. Ultimately, of course, the outcomes of greatest importance are those involving patients themselves. We

⁶⁴Payne, "A Strange Unaccountable Something: Historicizing Sexual Abuse Essays," 115–157.

⁶⁵Gordon. "Stress During Internship: A Prospective Study of Mood States," 228–231.

⁶⁶Christakis and Feudtner, "Temporary Matters. The Ethical Consequences of Transient Social Relationships in Medical Training," 739–743.

⁶⁷Matarosso, "No Appealing Solution: Evaluating the Outcomes of Arts and Health Initiatives," In *Medical Humanities*, 36–49.

⁶⁸Shapiro et al., "Point-of-View Writing: A Method for Increasing Medical Students' Empathy, Identification and Expression of Emotion, and Insight," in press.

⁶⁹Downie, "Medical Humanities: Means, Ends, and Evaluation," 204–222.

⁷⁰Hunter et al., "The Study of Literature in Medical Education," 787–794.

need to assess, for example, whether patients cared for by student-physicians who utilize reflective writing receive more effective care than patients of non-writing student-doctors.

Writing/reading/listening can help learners become comfortable with a reflective process that addresses loss of certainty, personal voice and others' voice, multiple perspectives, emotion, vulnerability, mindfulness, and witnessing. All of these in turn can play a positive role in professional development, patient care, and physician well-being. Our hope is that the conceptual model presented above can be used as a template from which to further investigate the place of reflective writing in medical education.

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