

Stretching the Comfort Zone: Using Early Clinical Contact to Influence Professional Identity Formation in Medical Students

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Edvin Schei¹ , Hannah Sofie Knoop², Malene Nordal Gismervik², Maria Mylopoulos³ and J Donald Boudreau⁴

¹Department of Global Public Health and Primary Care, Center for Medical Education, University of Bergen, Bergen, Norway. ²Faculty of Medicine, University of Bergen, Bergen, Norway.

³Department of Paediatrics, The Wilson Centre, University of Toronto, Toronto, ON, Canada.

⁴Department of Medicine, Centre for Medical Education, Faculty of Medicine, McGill University, Montreal, QC, Canada.

ABSTRACT

PURPOSE: To explore first-year medical students' affective reactions to intimate encounters with severely sick patients in their homes, within a curricular innovation targeting the development of a patient-centered professional identity.

BACKGROUND: Early patient encounters create complex emotional challenges and constitute fertile ground for professional identity formation. The literature indicates that students often learn, largely through the hidden curriculum, to avoid and suppress emotion. This can culminate in mental health problems and loss of empathy.

METHOD: A qualitative descriptive analysis of 28 randomly selected, mandatory, reflective essays focused on a home visit to a previously unknown patient, in an unsupervised group of 4 students, within the context of a structured course called Patient Contact—PASKON.

RESULTS: Students described a wide range of affect-laden responses, positive and negative, elicited by the home visits. The observations were typically related to loss of control, struggles to behave “professionally,” and the unmasking of stereotypes and prejudices.

CONCLUSIONS: Medical students' initial clinical encounters elicit emotional responses that have the potential to serve as triggers for the development of emotional maturity, relational skills, and patient-centered attitudes. Conversely, they can foreground uncertainty and lead to defensive distancing from patients' existential concerns. The findings point to a role for structured educational strategies and supervision to assist students in the emotion work necessary in the transition from a “lay” to a “medical” identity.

KEYWORDS: communication teaching, experiential learning, peer supervision, professionalism, professional identity formation

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CORRESPONDING AUTHOR: Edvin Schei, Department of Global Public Health and Primary Care, Center for Medical Education, University of Bergen, Kalfarveien 31, N-5018 Bergen, Norway. Email: Edvin.schei@uib.no

Introduction

Although compassionate caring for sick people is the quintessential function of clinicians, many medical students and physicians end up emotionally distanced from their patients.^{1–3} Students lose empathy,^{1,4,5} and clinicians are “courteous but not curious,”⁶ disregarding patients' narratives⁷ and clinically relevant life context.^{8,9} To “immunize” against empathy loss, Benbassat and Bauml¹⁰ recommend early patient contact, with a focus on patients' concerns, feelings, and sources of distress.

Evidence suggests that early patient contact can be difficult and troubling, yet provides motivation and relevance to medical studies and helps students acclimatize to clinical environments,^{11–17} develop self-reflection skills,¹⁸ and interact confidently with ill people.^{19–22} Medical students have described early patient contact as “the most exciting and exhilarating and also definitely the most frightening thing.”¹¹ Some students experience tension with others' corporeality, helplessness in front of death, guilt for using patients selfishly for learning purposes, shame related to intimacy,²³ and confusion in front of

a young attractive person.^{24–26} Helmich et al²⁷ identified 4 types of emotional dissonance in medical students during a nursing home rotation, caused by tensions between students' emotions and thoughts and what was happening or required in particular situations.

The task of regulating affect and self-expression in accordance with social norms,²⁸ by trying to create certain impressions and display appropriate emotions, has been termed “emotion work.”^{29,30} This aspect of professional identity formation has received little attention in medicine.^{1,2,23,31,32} Most studies of emotion in medical school have targeted students' reactions to the archetypal existential challenges of the profession, such as first experience of full body cadaveric dissection, first attendance at a postmortem (autopsy) examination, and first experience of the death of a patient.^{33–35} The widespread recognition that encounters with death and decay are emotionally and professionally difficult provides in itself a certain cultural support, permitting students to concede their emotional reactions and accept them as normal. We hypothesized that



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initial patient contact may be highly emotionally charged, but generally not recognized as particularly challenging, thus forcing students to cope by relying on defense mechanisms that may negatively affect their professional identity formation.

Studies of students' emotional reactions to initial patient contact have largely taken place in settings where relating to the patient is not the primary focus of teaching, but ancillary to other clinical tasks, such as history taking, communication skills, physical examinations, or nursing. By focusing on the tasks at hand, such teaching situations may inadvertently convey the impression that students' interactions with sick persons is a background process, expected to be mastered without preparation, supervision or reflection on the demands, pitfalls, and effects of professional relationships.³⁶ The hidden curriculum message is that novices' feelings during early patient contact, such as uncertainty, compassion, or embarrassment, are unprofessional, weak, or inept. Socialization mechanisms may prompt students to avoid emotion through ignoring, denying, or detaching from its source, ie, from patients' co-humanity and suffering.^{5,37-40}

To our knowledge, no studies have examined how junior medical students react to their initial patient encounters when relational aspects are the explicit target of learning. At the University of Bergen, a structured course in patient contact, PASKON, was created in 2013, with the double aim of helping first-year medical students learn from patients how sickness affects life and of guiding them toward patient-centered skills and an empathic presence in encounters with severely ill persons. The aim of this study was to explore how students described their thoughts, emotions, and behavior in essays written shortly after their first professional encounter with a gravely ill person, in the person's home.

Method

The PASKON course—an intended rite of passage

PASKON is a mandatory course where first-year medical students interact with 20 severely ill patients within a structured 40-hour educational program. The course starts 2 months after enrollment and runs for 6 months, at a time when students are exposed mainly to basic biological sciences, before anatomy and further clinical education starts. Half of the students are 19 years old, directly out of high school. The other half vary in age, with a range of 20 to 35. A minority have had previous professional experience. Two-thirds are female.

In PASKON, students in groups of 4 do an unaccompanied home visit to a seriously ill patient (see Table 1 for patient characteristics). Patient and student group subsequently convene in class and share stories and impressions with 80 peers in an interactive plenary session, with 2 physician-instructors. In total, students participate in ten 3-hour sessions, each comprising 2 patient presentations and 1 reflective session exploring aspects of sickness, personhood, physicianship, and patient-centered medicine. A textbook on

Table 1. Examples of patients^a in PASKON.

Woman 29, PhD in biology, colonic cancer, currently receiving palliative care, expecting to die within 2 months. Recently married, no children.
Woman 36, mother of Timon, 3, who has diabetes and gets insulin injections. She tells about fear of losing the child in nightly hypoglycemia, and the challenges of the whole family having to learn about diabetes management and adjusting to a new life.
Man 42, kidney failure, on dialysis, waiting for his third kidney transplant. Married, 2 teenage boys. Spends 4 days a week in hospital, severe fatigue, depression.
Man 38, previous artistic career, now chronic alcohol problems after surviving car accident where son was killed, feelings of guilt.
Woman 40, factory worker, single mother, disabled because of chronic back pain.
Woman 79, retired teacher and politician, partly paralyzed with severe balance problems caused by technical mistake in the ICU. The nurse and physician who were responsible at the ICU follow the patient in the auditorium.
Man 89, blind after mistake made by ophthalmologist. Previous small business owner. Helped by wife with heart failure and light dementia.

Abbreviation: ICU, intensive care unit.

^aPersonal characteristics have been changed.

communication and the physician role provides theoretical models and concepts for the course.⁴¹

PASKON intends to establish a patient-centered perception of medical professionalism and facilitate students' emotion work^{29,30} by normalizing emotions as integral to clinical work and to students' professional identity formation.³⁹ To ensure real emotional experiences while providing a safe and caring framework, the course seeks to emulate the archetypal structure of "rites of passage," a term used for highly orchestrated ordeals used in tribal societies to help adolescents overcome the fear connected with transition to adult status as hunters and warriors.^{42,43} Rites of passage consist of 3 phases. A separation phase triggers mental preparation and group formation, corresponding to the entry into medical school and the preparatory classes before the patient visit. The *limen* (threshold) is the subsequent stage of bewilderment and uncertainty, marked by anxiety-evoking tasks, laden with aspirations to incorporate the values, behaviors, and symbols of the new identity.^{42,44,45} In PASKON, this is the phase of intimate interaction with a severely sick person and the group of peers. The third phase is *integration*, the return to the community and collective interpretative work whereby the liminal experience attains its intended meaning. A new sense of identity may manifest during this phase. In PASKON, this is provided through supportive feedback from senior peers and clinical teachers, oral and written reflection, and 6 months of dialogical class sessions exploring medical professionalism, clinical relationships, and individual character formation.

The home visits contain elements of unpredictability similar to the unknowns often encountered in physicians' work.

Students are given the patient's demographics and diagnosis, but no information that could narrow down the possible scenarios and fantasies of having to talk at length with, eg, an unknown "61 year old man with metastatic malignant melanoma." Unaccompanied, they have to call the patient and arrange a suitable time to visit. The task is open-ended, to find out how this unknown patient's life is affected by sickness. Students know they will be in the hot seat a week later, presenting the patient to the class.

Students write a reflective essay of 500 to 800 words on "How was it to be me in the role of medical student in a professional conversation?" They are prompted to choose their own angle, such as "thoughts and feelings in advance of the visit, wonder and learning during the interaction with the patient and with the other students, thoughts about identity and self-understanding, thoughts about your development towards mastering a future physician role." The essays are commented upon by senior students who also coach groups before and after the home visits. The readers are trained to give feedback and can pass student essays, or ask for rewriting, but not fail them. The criterion for passing is that the text demonstrates at least a minimal effort at reflection (eg, beyond mere descriptions), as judged by the reader. All students end up passing.

Anonymous, web-based evaluations of PASKON from 2014 to 2018 consistently show high student satisfaction (response rate on average 60%, unpublished data). Eighty to ninety percent report that the course strengthens expectations of being able to deal with the uncertainty of clinical work and increases motivation for studying and practicing medicine.

Data collection and analysis

We conducted a qualitative descriptive analysis, randomly selecting 20 reflective essays from the 160 students of the 2014 class. After initial reading and analysis, an additional sample of 8 essays was analyzed. No new themes emerged. Hence, the sample was deemed sufficient for the purpose of the study. Data analysis consisted of systematic text condensation, whereby topics and themes from the texts were identified, coded, and categorized, through the following steps⁴⁶: (1) The material was read several times by the research team (E.S., H.S.K., and M.N.G.) to obtain a common overall impression of the main topics described by the students. (2) Short quotes from the texts (units of meaning) representing various aspects of the participants' experiences and reflections were extracted, translated into English, then coded and grouped by the research team. Through an iterative process of rereading and discussing, the grouped codes were refined and elaborated, until a final set of groups was agreed upon. Each group was categorized and named according to its meaning content. (3) For each of the categories thus constructed, a description of its content was produced, and quotations that illustrate the categories particularly clearly were selected.

The study was approved by the Norwegian Social Science Data, the data protection official for research for Norwegian universities.

Results

The essays differed considerably in style, narrative angles, and explicit attention to events and subjective experiences during the patient encounters, but indications of uncertainty, doubt, or surprise were present in all texts. Three categories of results that emerged from the analysis are presented in order of frequency.

Losing control

Students had divergent levels of previous experience with patient contact, some having worked in health care. Yet most students described nervousness ahead of this first patient encounter as a *medical student*:

Although I have some experience, this was something completely new. I have never been required to ask patients about their illness, and the feelings and thoughts about such things. [. . .] Therefore, I was incredibly excited and nervous ahead of this meeting.

Some tried to prepare by reading about patient communication and writing down questions in advance, but found it difficult to prepare because the situation was new and unpredictable:

I and the rest of my group soon found out that this meeting was not something we could really prepare ourselves for. We almost had to take it on the fly, an expression that for many of us high achievers is almost taboo.

Students described themselves as self-centered during the encounters, concerned with how they formulated themselves, how they appeared, or fearing that they might do something inappropriate or be unable to contribute. Some described unpleasant embarrassment, eg, when pauses occurred in the conversation:

I guess we didn't sit in silence for long, but it felt like an eternity.

Many were proud that they mastered this new and scary situation without crises or breakdowns, and felt lucky to be well received by a patient who was relaxed and chatty. [. . .] *It could not have gone better.*

Fumbling with professionalism

Students were concerned about appearing professional in the patient encounter, but also unsure about what it means to be professional and how to achieve it:

At first I was very self-conscious, thinking about whether I appeared listening enough, how does one actually look interested? I chose a nodding strategy, while trying to produce a concerned look on my face. As if I were gravely considering the patient's situation.

Some worried that the patient saw through their uncertainty and that fellow students might think they did not contribute enough:

I felt uncomfortable throughout the conversation. It wasn't the patient who was the problem, it was I. [...] I only captured a tiny fraction of it, and felt like a total failure.

Students wondered how to take notes without being impolite, how to interrupt a patient in a professional manner, and whether one ought to speak more formally than usual. Many reflected on the sort of emotional display that might be acceptable in a professional:

Is it okay to start crying in front of the patient? Is it professional? I do not want the meeting to be more tiring for the patient than it needs to be. It's actually the patient who is ill. I guess my answer is that I don't really think it's okay.

They feared showing inappropriate emotions, mostly sadness and tears, but also joy and laughter:

I'm unsure of myself, of what is expected of me. Am I doing it right now? Can I laugh out loud and make ironic remarks?

Many believed that one should not become too emotionally involved with the patient. One student wrote about her meeting with a married couple where one of them was dying. The spouse started to cry when they approached the topic of death. The student wanted to comfort her, but refrained:

I wish I'd put my hand on the woman's shoulder because that would have been human, even though it wouldn't have been professional.

Students reflected on how they may acquire the human skills they attribute to good physicians—to be compassionate and understanding, have empathy, be resourceful and clever. Statements such as “I have chosen the right profession” contrasted with “I have an incredibly long way to go.”

Preconceptions and stereotypes

For many, the patient experience was a thought-provoking encounter with their own prejudice. Students expressed surprise upon realizing that many patients appeared less sick than anticipated. A student described his vision of the dying patient he was preparing to meet:

I knew what the patient would look like. He would be pale, thin, with a tube from the nose, in a hospital gown, lying still in a bed [...]. As we inquisitively stuck our heads through the doorway I was puzzled to find myself wrong. The patient sat relaxed with normal clothes on his bed [...] and wasn't the least pale or miserable.

Many felt ashamed at their preconceptions, noticing how important it is not to judge someone by their diagnosis. They described this as a powerful learning experience:

Out of the door came a woman who was far more fit, healthier, nicer and more appealing than the stereotypical alcoholic I had seen in my mind's eye.

Students had preconceived ideas about the topics patients would want to talk about. Some commented that the patient seemed to hold back information, or doubted that the patient told the truth:

When I asked what she thought about death and the afterlife, she said she didn't give it much thought [...]. Though it may well be true that she actually didn't think much about it, I found it strange, given that the patient has a serious illness that few survive.

Many found the patients' level of trust surprising:

He had barely had time to shake our hands before he began to expound on some of the most personal things in their lives. It impressed me that the patient trusted us so much, but it also scared me a bit.

Discussion

In their essays, which they knew would be read by senior peers, these first-year students openly described and reflected upon an array of affective reactions to their first patient encounter. Emotions were often associated with threats to control, lack of comprehension of the professional role, and unmet stereotypical expectations of sick persons' needs and behavior.

Emotions in professional identity formation

The recurrent descriptions of insecurity and embarrassment demonstrate that emotional reactions were of central concern as these students digested their first experience of being immersed in a medical role. This is to be expected, given the complex challenge of the task, in which students had to negotiate both the normal obstacles of relating socially to older, unknown persons, of partaking in a team, and of participating in a professional dialogue concerning intimate body functions and the vulnerability of sickness. It has been suggested that encounters with others' sickness, decay, and death are inherently ambivalent, triggering both the impulse to help and feelings of anxiety or disgust.¹

The literature on professional identity formation devotes little attention to the emotional aspects of becoming a physician.^{18,39,47–51} When Cruess and others write about the formative processes of participating in professional communities of practice, they do not analyze in any detail the functions of emotion in socialization and acculturation processes.^{32,47,48} This indirectly confirms Shapiro and others' claims that emotion is largely eclipsed from the medical education discourse.⁵² The literature on students' mental health problems and empathy loss^{3,4,53} suggests that when medical students are left to their own devices for handling normal emotional reactions, professional identity formation is negatively affected.^{4,54} An illustrative example is Grochowski's study of students' reactions to anatomy dissection. The students demonstrated a “frank

denial of experiencing anxiety” while expressing a latent willingness to reveal strong emotional reactions in interviews.⁴⁰

Without guidance, medical students must inevitably resort to their private conceptions, largely rooted in cultural stereotypes and the hidden curriculum of medical education, of what it means to behave like a normal physician in patient interactions. “Normal behavior” in any culture is largely effected through humans’ desire to avoid emotions in the shame spectrum, such as embarrassment and ridicule.^{28,55,56} The oppression of emotional display in medical professional environments can thus be understood, paradoxically, as emotional, driven by the need to avoid shame by displaying stereotypical behavior deemed to be “medical.” That the stereotype of “physician” is often non-emotional is illustrated by the student who wrote “I wish I’d put my hand on the woman’s shoulder because that would have been human, even though it wouldn’t have been professional.”

The educational potential of rites of passage

Education that attempts to influence learners’ character formation, perceptions, and clinical behavior needs to be rooted in concrete, personal experience, preferably in conjunction with theory, examples, and reflection on empirical facts. Behavior is influenced by tacit knowledge and complex nonconscious processing that develop through *practice*, where preconceptions may clash with the messiness of reality,^{57–59} generating emotions that represent powerful opportunities for identity change and personal development, for better or for worse. The concept of “rites of passage” provides a simple framework for identifying such learning opportunities, as in the case of cadaver dissection, or for creating them, as in PASKON. Instead of emotional upheaval resulting in distancing, self-doubt, and burnout, it may be converted into resilience.³ The literature and our findings suggest that this can be done by respecting and normalizing the emotional confusion of the liminal phase, and then providing structured, caring and professionally meaningful ways of reorientation and integration, through storytelling and reflection, and through community and identification with more advanced members of “the tribe” of medical professionals, such as senior peers and experienced physicians.

Strengths and weaknesses

The qualitative design does not allow any conclusions concerning the prevalence and distribution of emotional reactions to patient encounters. The thematic analysis may have been biased by the authors’ interest in emotion. A potential bias may have been introduced by the students’ knowledge that their texts were to be read by senior peers, possibly causing them to pay strategic “lip service” to the stated objectives of the course. Lack of comparison groups makes it impossible to state unequivocally what the influence of the PASKON course was, or the impact of its various educational ingredients, on students’ experiences of and

reports on emotions connected with the patient encounter. Seen in light of the literature presented, however, the results suggest that the structure and content of the course may have influenced students’ tacit and explicit notion of professional identity, in particular by signaling that the experience and sharing of unsettling emotion is normal, healthy, and often professionally useful, in patients, medical students, and physicians. Further research should investigate whether similar educational measures can secure lasting effects on students’ emotional health and patient-centered attitudes and skills.

Conclusions

Initial patient encounters are experienced as intensely important by medical students and evoke a rich array of emotional reactions. Research suggests that suppression of emotion in medical learning environments is associated with a withering of empathy in medical students and with burnout and depression.^{3,4,37,53} Future educational research should focus on how to support and empower medical students in their processes of learning to expect, appreciate, and turn to good clinical use the range of emotions that emerges in sickness and helping relationships. We need teaching environments that will support and care for medical students, so that future physicians may find it natural to support and care both for their patients and for themselves.

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Ethical Approval

Ethical approval has been waived by Norwegian Social Science Data (NSD), March 26, 2014, ref. no. 37916.

Previous Presentations

Excerpts of the findings were presented at the Canadian Conference on Medical Education, Winnipeg, May 1, 2017.

ORCID iD

Edvin Schei  <https://orcid.org/0000-0002-7826-4124>

REFERENCES

1. Shapiro J. Walking a mile in their patients’ shoes: empathy and othering in medical students’ education. *Philos Ethics Humanit Med.* 2008;3:10.
2. Wilcox MV, Orlando MS, Rand CS, et al. Medical students’ perceptions of the patient-centredness of the learning environment. *Perspect Med Educ.* 2017;6:44–50.
3. Dyrbye L, Shanafelt T. A narrative review on burnout experienced by medical students and residents. *Med Educ.* 2016;50:132–149.
4. Ekman E, Krasner M. Empathy in medicine: neuroscience, education and challenges. *Med Teach.* 2017;39:164–173.
5. Sinclair S. *Making Doctors. An Institutional Apprenticeship.* Oxford and New York: Berg; 1997.

6. Agledahl KM, Gulbrandsen P, Førde R, Wifstad Å. Courteous but not curious: how doctors' politeness masks their existential neglect. A qualitative study of video-recorded patient consultations. *J Med Ethics*. 2011;37:650–654.
7. Launer J. *Narrative-Based Primary Care: A Practical Guide*. Abingdon: Radcliffe Medical Press; 2002.
8. Weiner SJ, Schwartz A. Contextual errors in medical decision making: overlooked and understudied. *Acad Med*. 2016;91:657–662.
9. Cassell EJ. *The Nature of Suffering and the Goals of Medicine*. 2nd ed. New York, NY: Oxford University Press; 2004.
10. Benbassat J, Bauml R. What is empathy, and how can it be promoted during clinical clerkships? *Acad Med*. 2004;79:832–839.
11. Briggs-Style C, Maxwell JA, Moore GT. The effects of early patient contact: the student's perspective. *Acad Med*. 1990;65:S33–S34.
12. Yardley S, Littlewood S, Margolis SA, et al. What has changed in the evidence for early experience? Update of a BEME systematic review. *Med Teach*. 2010;32:740–746.
13. Graungaard AH, Andersen JS. Meeting real patients: a qualitative study of medical students' experiences of early patient contact. *Educ Prim Care*. 2014;25:132–139.
14. Lassen LC, Larsen JH, Almind G, Backer P. Medical students experience early patient contact in general practice. A description and evaluation of a new course in the medical curriculum. *Scand J Prim Health Care*. 1989;7:53–55.
15. von Below B, Hellquist G, Rodjer S, Gunnarsson R, Björkelund C, Wahlqvist M. Medical students' and facilitators' experiences of an Early Professional Contact course: active and motivated students, strained facilitators. *BMC Med Educ*. 2008;8:56.
16. Wenrich MD, Jackson MB, Wolfhagen I, Ramsey PG, Scherpbier AJ. What are the benefits of early patient contact? A comparison of three preclinical patient contact settings. *BMC Med Educ*. 2013;13:80.
17. Liao SC, Hsu LC, Lung CH. Early patient contact course: "Be a friend to patients." *Med Educ*. 2008;42:1136–1137.
18. Dornan T, Littlewood S, Margolis SA, Scherpbier A, Spencer J, Ypinazar V. How can experience in clinical and community settings contribute to early medical education? A BEME systematic review. *Med Teach*. 2006;28:3–18.
19. Littlewood S, Ypinazar V, Margolis SA, Scherpbier A, Spencer J, Dornan T. Early practical experience and the social responsiveness of clinical education: systematic review. *BMJ*. 2005;331:387–391.
20. Ahrweiler F, Scheffer C, Roling G, Goldblatt H, Hahn EG, Neumann M. Clinical practice and self-awareness as determinants of empathy in undergraduate education: a qualitative short survey at three medical schools in Germany. *GMS Z Med Ausbild*. 2014;31:Doc46.
21. Hojat M. Ten approaches for enhancing empathy in health and human services cultures. *J Health Hum Serv Adm*. 2009;31:412–450.
22. Cade J. An evaluation of early patient contact for medical students. *Med Educ*. 1993;27:205–210.
23. Shapiro J. The feeling physician: educating the emotions in medical training. *Eur J Pers Cent Healthc*. 2013;1:310–316.
24. Pitkala KH, Mantyranta T. Feelings related to first patient experiences in medical school: a qualitative study on students' personal portfolios. *Patient Educ Couns*. 2004;54:171–177.
25. Helmich E, Bolhuis S, Dornan T, Laan R, Koopmans R. Entering medical practice for the very first time: emotional talk, meaning and identity development. *Med Educ*. 2012;46:1074–1086.
26. Smithson S, Hart J, Wass V. Students' hopes and fears about early patient contact: lessons to be learned about preparing and supporting students during the first year. *Med Teach*. 2010;32:e24–e30.
27. Helmich E, Bolhuis S, Laan R, Dornan T, Koopmans R. Medical students' emotional development in early clinical experience: a model. *Adv Health Sci Educ Theory Pract*. 2014;19:347–359.
28. Goffman E. *The Presentation of Self in Everyday Life*. New York, NY: Doubleday; 1959.
29. Hochschild AR. Emotion work, feeling rules, and social structure. *Am J Sociol*. 1979;85:551–575.
30. Zapf D. Emotion work and psychological well-being: a review of the literature and some conceptual considerations. *Hum Resour Manage R*. 2002;12:237–268.
31. Cooke M, Irby DM, O'Brien BC. *Educating Physicians: A Call for Reform of Medical School and Residency*. Carnegie Foundation for the Advancement of Teaching. 1st ed. San Francisco, CA: Jossey-Bass; 2010.
32. Cruess RL, Cruess SR, Steinert Y. *Teaching Medical Professionalism*. 2nd ed. Cambridge and New York: Cambridge University Press; 2016.
33. Wisenden PA, Budke KJ, Klemetson CJ, et al. Emotional response of undergraduates to cadaver dissection. *Clin Anat*. 2018;31:224–230.
34. Borgstrom E, Barclay S, Cohn S. Constructing denial as a disease object: accounts by medical students meeting dying patients. *Social Health Illn*. 2013;35:391–404.
35. Hafferty FW. *Into the Valley: Death and the Socialization of Medical Students*. New Haven, CT: Yale University Press; 1991.
36. Street RL Jr, Makoul G, Arora NK, Epstein RM. How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Educ Couns*. 2009;74:295–301.
37. Mahoney S, Sladek RM, Neild T. A longitudinal study of empathy in pre-clinical and clinical medical students and clinical supervisors. *BMC Med Educ*. 2016;16:270.
38. Hafferty FW. Cadaver stories and the emotional socialization of medical students. *J Health Soc Behav*. 1988;29:344–356.
39. Hafferty FW. Socialization, professionalism, and professional identity formation. In: Cruess RL, Cruess SR, Steinert Y, eds. *Teaching Medical Professionalism*. 2nd ed. Cambridge and New York: Cambridge University Press; 2016:54–67.
40. Grochowski CO, Cartmill M, Reiter J, et al. Anxiety in first year medical students taking gross anatomy. *Clin Anat*. 2014;27:835–838.
41. Schei E. *Lytt. legerolle og kommunikasjon* [Listen. Physicianship and communication]. Bergen: Fagbokforlaget; 2014.
42. Genep Av, Vizedom M, Caffee GL. *The Rites of Passage*. Chicago, IL: University of Chicago Press; 1960.
43. Mayrhofer W, Iellatchitch A. Rites, right? The value of rites de passage for dealing with today's career transitions. *Career Dev Int*. 2005;10:52–66.
44. Turner V. *Blazing the Trail. Waymarks in the Exploration of Symbols*. Tucson, AZ: The University of Arizona Press; 1992.
45. McNamara O, Roberts L, Basit TN, Brown T. Rites of passage in initial teacher training: ritual, performance, ordeal and numeracy skills test. *Brit Educ Res J*. 2002;28:863–878.
46. Malterud K. Systematic text condensation: a strategy for qualitative analysis. *Scand J Public Health*. 2012;40:795–805.
47. Cruess RL, Cruess SR, Boudreau JD, Snell L, Steinert Y. A schematic representation of the professional identity formation and socialization of medical students and residents: a guide for medical educators. *Acad Med*. 2015;90:718–725.
48. Goldie J. The formation of professional identity in medical students: considerations for educators. *Med Teach*. 2012;34:e641–e648.
49. Niemi PM. Medical students' professional identity: self-reflection during the preclinical years. *Med Educ*. 1997;31:408–415.
50. Sharpless J, Baldwin N, Cook R, et al. The becoming: students' reflections on the process of professional identity formation in medical education. *Acad Med*. 2015;90:713–717.
51. Wilson I, Cowin LS, Johnson M, Young H. Professional identity in medical students: pedagogical challenges to medical education. *Teach Learn Med*. 2013;25:369–373.
52. Shapiro J. Perspective: Does medical education promote professional alexithymia? A call for attending to the emotions of patients and self in medical training. *Acad Med*. 2011;86:326–332.
53. Rothenstein LS, Ramos MA, Torre M, et al. Prevalence of depression, depressive symptoms, and suicidal ideation among medical students: a systematic review and meta-analysis. *JAMA*. 2016;316:2214–2236.
54. Dyrbye LN, Massie FS Jr, Eacker A, et al. Relationship between burnout and professional conduct and attitudes among US medical students. *JAMA*. 2010;304:1173–1180.
55. Goffman E. *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, NJ: Prentice Hall; 1967.
56. Scheff TJ. Shame in self and society. *Symb Interact*. 2003;26:239–262.
57. Kemmis S. Phronesis, experience, and the primacy of praxis. In: Kinsella EA, Pitman A, eds. *Phronesis as Professional Knowledge. Practical Wisdom in the Professions*. Rotterdam: Sense Publishers; 2012:147–162.
58. Schei E, Fuks A, Boudreau JD. Reflection in medical education: intellectual humility, discovery, and know-how [published online ahead of print November 20, 2018]. *Med Health Care Philos*. doi:10.1007/s11019-018-9878-2.
59. Wenger E. *Communities of Practice: Learning, Meaning, and Identity*. New York, NY: Cambridge University Press; 1998.