The Missing Curriculum: Experience with Emotional Competence Education and Training for Premedical and Medical Students

Loma K. Flowers, MD
San Francisco, California

Medical education has long overlooked teaching the normal psychodynamics of everyday adult life (psychonormality) in favor of training in psychopathology. Proficiency in psychonormality skills (i.e., emotional competence) includes skilled management of internal emotions, external situations and relationships, and promotes patient satisfaction and healthcare outcomes as well as better mental health for practitioners. In particular, teaching psychonormality skills can be helpful to underrepresented minority (URM) students whose psychonormality experiences may differ from the culture of mainstream medical education. This paper outlines a clinically derived, pragmatic, five-step course designed to educate and train students for emotionally competent medical practice. A real-life example taken from an introductory workshop presentation of this course at a Student National Medical Association meeting is presented to illustrate the student-oriented application of the concepts. The enthusiastic reception accorded such workshops suggests an unmet need for this type of training in medical curricula. Benefits could include improved doctor–patient relationships and associated healthcare outcomes as well as higher retention of competent, professional, satisfied and healthier physicians, particularly URMs. Medical schools and residencies are encouraged to carefully evaluate the impact of incorporating psychonormality education and emotional competence training into their present curricula and faculty development.

Key words: medical student education ■ emotional competence ■ communication skills ■ stress reduction ■ underrepresented minorities

INTRODUCTION

Ever since Freud published the *Psychopathology of Everyday Life* in 1904,[1,2] the field of mental health has focused on psychiatric disorders to the neglect of the normal psychodynamics of life, particularly in adults. The term "mental health" has come to imply mental illness, not health, and the study of pathology has far outstripped any exploration of disease prevention and health promotion in psychiatry.[3] This prolonged neglect is reflected in a dearth of medical and psychiatric vocabulary for normal psychodynamics and psychological growth and development of adults compared to the extensive vocabulary of psychopathology.[4]

For brevity, I suggest the term "psychonormality" to designate the complicated area encompassing the vast range of socially acceptable, ordinary adult responses to everyday events, including interpersonal transactions. Such responses necessarily combine content and process and, furthermore, involve both internal and external reactions. Internal reactions include feelings, thinking and judgment. External reactions include actions or behavior, such as observations, communications or activities that are generated by internal reactions. Thus, psychonormality is a functional aspect of socially acceptable daily life, including medical training and practice.

Despite recent evidence indicating that skills in psychonormality significantly improve both patient outcomes[5] and the degree of career success achieved in business,[6] science and medicine,[7] systematic and comprehensive approaches to this knowledge have been conspicuously missing in medical education.[8]

This paper describes a pragmatic, experiential approach to this missing curriculum that has been well received both in the United States and England. The medical school edition of this curriculum was adapted from one developed in 1994[9] and subsequently adapted for various groups from high-school students to college faculties. Faculties have requested training in this course to be in a position to keep up with and reinforce the training that students received.

The curriculum, which administrators named Emotional Empowerment, combines three perspectives on psychonormality education: faculty/administrators, student and clinical. Clinical psychiatry experience provided the premises for the original curriculum development and informs the teaching interventions. Comprehensive breadth evolved to specifically address all students' individual and diverse needs. The necessity for individual approaches to the development of emotional competence has been noted elsewhere[7] and may partially explain the persistence of the psychopathology model with its individualized treatment approach. In each Emotional Empowerment seminar or workshop, students' collective and individual experiences with and ignorance of the issues, skills and concepts of psychonormality determine the breadth and depth of the discussions. Faculty, staff and students provide specific teaching examples.

THE EMOTIONAL EMPOWERMENT CURRICULUM

Background

Although Aristotle (384–322 B.C.) and Spinoza (1677) both noted the link between emotions and intellect,[10] the impressive intellectual advances in science in the 20th century have eclipsed this connection. Fortunately, in the last 20 years, academics and practitioners have paid increasing attention to aspects of psychonormality particularly in business,[8] education and psychology. Gardner's concept of multiple intelligences explores, among other types, personal intelligence,[11] which is the capacity to learn intrapersonal skills (internal skills like self-understanding and effective self-assessment) as well as interpersonal skills (external skills fundamental to relationships such as communication, collaboration and empathy.)[12] Goleman has popularized the equivalent concept of emotional intelligence and its corollary emotional competence, comprised of personal (internal) and social (external) competencies.[13] Salovey, Mayer and Caruso synthesize similar ideas into the emerging field of positive psychology, which seeks to balance a focus on psychopathology with attention to building the best qualities in life.[14]

Two early studies of enhancing medical students' emotional competence in the areas of empathy, communication skills and personal growth are now in progress.[15,16] In addition, medical educators and practitioners have begun to systematically address

---

Table 1. Outline of psychonormality course

The 5 Cyclical Steps	Core Topics for Exploration
I. Self-Awareness	Dreams and Dream Interviewing Feeling Management (Protocol in Table 2) Human diversity paradigms as a context Communication: verbal & nonverbal
II. Self-Development (change)	Identity definition and evolution Change from conflict, failure, success and opportunity Grief, loss, letting go and moving on Taking Charge: ABC of Decisions Dependency Issues: independence, dependence and interdependence Balance in life
III. Relationships	Relationship management overview Interpersonal transactions, step by step "Quick learning:" for rapid data assimilation and interpersonal adjustments Facets of relationships
IV. Self-Responsibility	Autonomy and Self-reliance Plans and Structure Self-assessment with honesty, accuracy and kindness Leadership Values, Judgment and Judgments Spirituality & Religion Health: mental and physical interface, prevention, maintenance and treatment Lifestyle: authenticity vs. image
V. Reflection	Integrating the emotional empowerment course with life experience Periodic journal reviews

---

practical applications of psychonormality skills for improved patient care, such as communication skills training,[17] and stress-reduction practices in diabetes management.[18]

Of special importance to underrepresented minorities (URMs), i.e., African Americans, Hispanics, Native Americans and Asians/Pacific Islanders, medical educators have noted that competence in certain segments of psychonormality increases performance in postbaccalaureate and premedical students.[19] These segments include such items as study and reading skills, coping techniques and personal growth, and are often referred to as "noncognitive variables," an unfortunately inaccurate and pejorative misnomer. Researchers have demonstrated the importance of these variables in medical school success,[20] especially for URMs.[21] This recognition generated the recent adaptation of the Emotional Empowerment course to teach integrated psychonormality skills to medical students and students enrolled in pre- and postbaccalaureate programs. This curriculum is now being considered for faculty wishing to enhance emotional competence. Once trained, they could potentially become trainers.

Course Overview

Emotional Empowerment presents the fundamentals of psychonormality divided into five interrelated basic steps or tasks that adults continually repeat throughout the normal growth and development of their psychonormality skills (Table 1.) The five steps provide a basic framework designed to help students organize and integrate their prior knowledge and skills, recognize what skills they lack and take action to develop them.

Such fundamental structuring is necessary because psychonormality has been so long overlooked or discounted[22] that few people in my clinical experience have a sound grasp of either its basic parameters or its pivotal role in their failures or successes. Like most people, students have uneven emotional competence haphazardly gleaned from family psychodynamics and behavior, occasional self-help books and rarely from psychotherapy. Some benefit from psychology or medical courses that cover clinical practice skills or the biopsychosocial model of culturally relevant, ethical medical care.[23] Unfortunately, this leaves their knowledge compartmentalized and without synthesis and integration into clear psychonormality concepts and related skills, such as insight, situational analysis, strategy development and communication. Furthermore, medical students and physicians frequently deny their feelings and ignore regrettable aspects of their professional and/or personal behavior. This greatly obstructs their learning from experience. Life-threatening deficits can be associated with an inflated view of one's skills, which further impedes learning.[24]

The Feeling Management Protocol (Table 2) is a lynchpin and model for the entire course. Feeling management requires identification, articulation, categorization and processing of feelings before developing an effective action plan. An eight-page feeling glossary helps students identify and name feelings, a sine qua non of self-awareness and feeling management. The protocol facilitates the skillful coordination of "The Big Four:" emotions, thinking, judgment and actions when confronting a particular situation, event or decision. This skill strongly supports sustained professional competence.

Various exercises are used to train the participants in skills related to the five steps, from interpersonal skills, such as reading nonverbal communications to journaling regularly to facilitate feeling management. The documented health benefits of journaling about facts and feelings[25] intrigues many students. Such exercises provide them an opportunity for supervised practice. Extending the course over months or years permits repeated self-evaluations of performance with guided self-corrections for accumulating an integrated depth of understanding as well as myriad opportunities for honing various skills in class, with patients and in rounds.

The Five Steps of Emotional Empowerment

Step 1: Self-Awareness, the cornerstone of psychonormality, includes insight into one's motivations, emotions, needs, behavior and ambitions as well as into one's competence in juggling personal, emotional and intellectual strengths and weaknesses. In this step, the use of dreams for insight and problem-solving is introduced.[26] Students explore nightmares (such as examination anxiety dreams,) dream recall and presleep instructions.[27] Dream interviewing,[28,29] a method of interpretation done alone or with a friend, develops skills necessary for competent medical practice, i.e., orderly thinking, precise description and articulate expression. Moreover, adequate sleep for problem-solving competence[30,31] is emphasized.

As a prerequisite for conscious identity development, students are taught to observe the enormous range of diversity in colleagues and patients along a few parameters, not only culture and creed but also temperament, personality styles, intelligences and even size, as a context for their own identity. Recognizing one's place in human diversity develops perspectives key to interpersonal skills and learning that support competent patient care and professional advancement. Communications, intentional or unintentional, verbal and nonverbal, as well as basic feeling management for

constructive behavior are introduced.

Step 2: Self-Development is a perpetual psycho-normality issue for physicians. It requires thorough knowledge of one's own identity and the sources and forms of its constant evolution triggered by opportunities, conflicts, failures and successes. Also addressed are issues of independence, interdependence and dependence, and the power of decision-making using a simple rating technique (A—alternatives, B—benefits, C—cost/consequences) to clarify the active developmental process in professional choices or balance in life.

The potential of relationships (Step 3: Relationships) as both resource and trouble requires constant awareness of the key links and distinctions between motivation and impact as well as content and process in sophisticated interpersonal skills. Facets of relationships, such as boundaries, limits, reparations, levels of intimacy and terminations/goodbyes, are discussed. The doctor–patient relationship, the teamwork of medical seminars and conversations with third-party providers are opportunities for regular applications of interpersonal skills to medical practice.

Step 4: Self-Responsibility includes initiative, plans and structure, e.g., how best to prepare for exams from MCATS to boards given your learning style. Professional and personal values and judgment are addressed including the prevalent sexual harassment issues. Applications of self-responsibility broader than are usually addressed in medicine are important to successful professional development and problem prevention, e.g., the impact of lifestyle choices on financial issues, ethics, spirituality and/or health.

Medical students learn to reflect (Step V: Reflection) for diagnostic and treatment purposes, but the hectic pace of medicine requires deliberate intention to carve out the time necessary to extend reflection to emotional competence issues. Yet, like other preventive measures, when used constructively and efficiently, reflection can often save more than it costs in the long run. The course itself models directed use of reflective time and at best initiates a life-long process of reflection.

EMOTIONAL EMPOWERMENT TRAINING EXAMPLE

A URM medical student volunteered this "case-based" situation in a workshop at a Student National Medical Association (SNMA) conference. The example illustrates the importance of facility with the entire curriculum in order to analyze the multiple psychonormality issues involved and to develop a constructive response by "walking the issue through the steps" (Table 1).

The student was in a quandary about an extreme-ly distressed friend, a fellow student, (a dual failure of Step 1, feeling management) (Table 2). The friend was also denying that he needed professional help, (Step 4, mental health maintenance.) Consequently, the friend was overly reliant on the student, (Step 2, dependency) causing him considerable stress, (Step 3, boundaries and limits.)

With reflection (Step V) and guided discussion through relevant aspects of all four steps, the student first identified the major components of his own distress in order to be able to devise an optimal resolution of the situation (Step 1, feeling management). In brief, when his advice to seek professional help was rejected, his sense of interpersonal impotence became intolerable. His ability to rapidly delineate and articulate complex feelings in a public forum indicated excellent self-awareness skills of feeling identification. However, his delayed self-exploration postponed resolution of the situation and prolonged his stress. The delay stemmed in part from his inadequate relationship skills, i.e., "What's the point of knowing the precise etiology of my stress when there's nothing I can do about it?" His compassion, a common characteristic of good physicians, coupled with inadequate limit setting skills, was problematic. He was reluctant to reject his friend's dependency partially because his friend would then overburden a mutual friend. (Step 4, limit setting.) Although passive self-awareness is necessary for resolution, it is not sufficient. Resolution requires an active, working self-knowledge and a comfortable familiarity with process (Step 2, decision-making and change).

His eventual plan (Step 4, plans and structure) explicitly limited his responsibility by acknowledging his own vulnerability in the situation (Step 1, verbal communication), thereby modeling how to cope without denial (Step 4, leadership) and telling the friend (Step 3, relationships), "Listen, *I* can't take your distress anymore, even if you can, so you've *got* to go with me to the health center for an evaluation and *at least* get a professional opinion about whether or not you need help. Now, when can you be ready? Let's go."

If enacted, this plan could initiate an appropriate intervention. A back-up plan was also devised, the first step of which was to tell his friend, "If you don't go, I'm going to talk to [the school administration] myself about you." This intervention was designed to separate out his friend's fear of stigma/desire for privacy from denial of need for professional help. The last resort was to enact the back-up plan to diminish suicide risk and transfer responsibility appropriately to the school administration.

The student volunteer demonstrated considerable skills: connections, empathy, compassion, initiative, awareness of limits, help-seeking, and mental health

awareness. Nonetheless, this exercise furthered his development in a number of areas relevant to medical practice: communication, boundaries, balancing and maximizing the number of needs met for everybody involved, clarifying values, leadership, limit setting, plans and structure.

Other students in the workshop practiced teamwork with coaching during the development of "the best plan for now and later." They also listed a number of gains from the volunteer's open modeling. The list included increased realization of what self-awareness is, increased insight, more conscious awareness of the impact of nonverbal communication on others, increased confidence in situational analysis and positive decision-making, new understanding of the steps behind emotional competence and additional strategies for self-empowerment.

DISCUSSION

Neglect of psychonormality is reminiscent of medicine's earlier omission of cultural competence training,[32] a concept that has gradually gained acceptance. Interestingly, cultural and emotional competences overlap, especially in relationships where cultural competence is a subset of emotional competence. Although interpersonal skills, including communication skills, are now recognized to be associated with good clinical outcomes and patient satisfaction,[17] their teaching and evaluation, and complementary faculty development still require considerable attention.[33]

The importance of relationship skills is reflected, for instance, in the association of good doctor–patient relationships with adequately informed patient consent. Also, reduced risk of malpractice suits, even with adverse patient outcomes, is similarly associated with good doctor–patient relationships.[34,35] The well-known stress of malpractice suits compounds the stress of medical practice, and the impact of this additional stress on the resilient individuals admitted to medical schools is easily underestimated. Discussions of psychonormality in professional training could contribute to necessary changes in professional attitudes and institutional policies needed to encourage physicians to seek appropriate psychiatric help when indicated.[36]

Professional relationships that are an integral component of medical practice, especially in groups, HMOs and hospitals, also need management. In my professional experience, physicians also generally ignore obviously defective interpersonal skills on rounds and at interdepartmental conferences, despite the negative impact on others. Relationship management in mentoring fares somewhat better, with orientations and guidance in some programs; however, the unstructured apprenticeship nature of many such programs can result in uneven quality.[37] Issues of professionalism, sometimes addressed as the hidden curriculum, may well relate to inadequate relationship skills and are part of the missing curriculum.

One source of difficulty in professional relationships is the absence of a common psychonormality framework, something I noticed while teaching the psychiatric aspects of medical practice in the 1980s to diverse groups of medical students. There was a tacit assumption that everyone should adapt to the framework of the senior physician present, regard-

---

Table 2. A 10-step feeling management protocol: coordinating "The Big Four": feelings, thinking, judgment and action

1. *Time out.* When an event or situation occurs, pause while you complete steps 2–5. (An event can be examination anxiety, a patient interview, alcohol/drug abuse, family issue, academic challenge, safe sex concerns, need for an important decision, noticeable stress, etc.) This seems simple, but many problems derive from impulsive responses that preclude thinking or reflection about consequences.

2. *Analyze what happened,* i.e., examine the whole story, in chronological order, distinguish cause and effect, include feelings. Journaling helps here.

3. *Name all your feelings* as precisely as you can. Use feeling glossary provided.

4. *Sort your feelings* into relevant, anachronistic and irrelevant, i.e. dragging in the kitchen sink.

5. *Face all your feelings.* Process them by exploring, examining and experiencing them without acting on them. This process can be facilitated by crying, journaling and talking to an appropriate person.

6. *Choose the best result for now and later.* Use good judgment and attend to relevant feelings.

7. *Plan how* to make that "best result" happen. Think carefully and be realistic. Set timelines. Enlist support from appropriate friends, colleagues, faculty, peers and professionals.

8. *Follow your plan* and nothing but your plan, but do follow your plan. Act.

9. *Evaluate your results:* examine feelings, what worked, what didn't and why.

10. *Accept the results and move on.* Cycle back to *time out* with the modified or new situation p.r.n.

less of its adequacy or the emotional uncertainty these sequential adaptations created. A shared group perspective facilitates the complex dynamics and management of the normal stressful events and relationships of everyday medical life and supports the sustained practice of emotional competence. These skills can also be extrapolated to family relationships, enriching doctors' personal lives and families as well as their larger communities. Even minimal education in the basic understanding and skills required to manage relationships has proved effective in improved life management.[38]

Teaching psychonormality and emotional competence throughout the four years of medical education and beyond allows time for the kind of integration of skills consistent with Zull's work on the neurophysiology of deep learning. Such learning requires the gradual development of neuronal networks for the learning cycle of concrete experience, reflective observation, abstract hypothesis and active testing to occur.[39] Optimal changes in students from prolonged education might be reflected (and measured) in numerous ways, e.g., higher grades, higher retention, greater patient compliance, lower rates of malpractice suits, or increased health and happiness in successful graduates.

Further justification for incorporating the missing curriculum into medical education comes from the high stress level physicians experience as both practitioners and patients. We need new management approaches for a number of interrelated reasons. First, stress management for medical students, house staff and faculty has traditionally been based in psychopathology, such as support groups and/or improved access to psychiatric services, now often known by positive names, e.g., well-being. The medical board diversion programs are another psychopathology-based approach to the issue in physicians. In my experience, interventions rooted in psychopathology, rather than psychonormality, can be helpful but also tend to reinforce denial and inadvertently reinforce stigma by providing psychiatric treatment while neglecting psychonormality skills. Furthermore, the ubiquitous psychopathological perspective fails to address and even covertly encourages the use of destructive methods of coping that are often hidden or considered socially normal, such as tobacco, alcohol[40] or substance abuse,[41] eating disorders, somatization,[27] and caffeinism with its associated irritability and sleep deprivation.

With regard to URM physicians, psychotherapeutic approaches to issues of psychonormality are even more problematic for African Americans, since they utilize psychiatric services less and are therefore less likely to be reached by such interventions.[42] This is consistent with my professional experience providing treatment and support and process groups

to medical students and residents for over 30 years.

Secondly, the relationship between stress and physical health threatens both physicians and patients alike and is particularly obvious in African Americans. Documented as suffering from disparate healthcare access, African-American patients (whose number includes doctors), also suffer a higher incidence of illnesses and disabilities linked to stress, such as asthma, arthritis, diabetes, obesity and pain. Moreover, the African-American physician's own risk of hypertension may potentially affect the number of practicing URM physicians and, hence, not only his/her life but also healthcare access for minority communities.[43] Yet, stress management (another pathology-based term) is still not consistently addressed in medical care, and this omission appears related to the physician's lack of personal practice of stress management.[44]

Thirdly, the diminishing job satisfaction of practicing physicians[45] also argues for a new approach to physician stress for the benefit of the individuals and the profession. For instance, in my experience, successful men traditionally employ emotional competence less to handle stress than successful women, who more easily use spontaneous crying to facilitate feeling management. Therefore, I suspect a connection between the unaddressed stress in the face of diminished autonomy; status and financial rewards in medical practice; and the decline in men applicants, including African Americans, over the last 25 years.[46] If this suspicion is accurate, increasing emotional competence in male physicians would increase job satisfaction and therefore the attractiveness of the profession to men applicants. In particular, more URM male applicants would support the diversity of physicians needed for medically underserved communities.[47]

Traditionally, medical schools support expanded professional development with mentoring. However, as scientific education in medicine has evolved from apprenticeship alone to a formal curriculum with variable mentoring in the last 150 years, it may be time for a comparable evolution in curriculum to include formal education about psychonormality and related skills. Students easily understand and engage with the concepts, and report gratitude and empowerment from formal psychonormality education. Many indicate that they find the process of deliberate insight and self-development unfamiliar but intriguing. They resolve to both journal and read more after workshops, but disparate self-help books, although valuable, are difficult to integrate by oneself into a sophisticated, workable approach.[48]

CONCLUSIONS

Medical and premedical students are generally inadequately prepared for the emotional competence necessary for healthy medical training and practice

and have only a fragmented appreciation of basic psychonormality concepts and skills from which such competence is derived. This is important to the profession as a whole and to URM premedical and medical students, physicians and patients in particular, since it may affect a number of issues from professional success to access to care.

Practical experience in teaching a basic psychonormality course for emotional competence in workshops and seminars to students and professionals, including premedical and medical students, has met with positive response. Students express appreciation for their increased awareness and emotional competence skills resulting from the formal education and training described in this paper. On this basis, I am suggesting consideration of an addition to medical curricula of psychonormality education and training.

Further experience with carefully designed courses, evaluated for effectiveness, is necessary to test a number of clinical impressions. For instance, is a higher level of basic emotional competence in medical education, training and practice correlated with a reduction in physician stress and inappropriate stress tolerance with its related health problems? In addition, it would be interesting to evaluate the influence faculty training in psychonormality might have on job satisfaction or more timely interventions for pressures common to the practice of medicine. Just as medicine has incorporated training in cultural competence, the profession may now be ready to explore the benefits of training in psychonormality.

ACKNOWLEDGEMENTS

REFERENCES

1. Freud S. Psychopathology of Everyday Life. Trans. Brill AA. New York: Mentor Books; 1951.

2. Jones E. The Life and Work of Sigmund Freud. New York: Basic Books; 1953.

3. Mental Health: a report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services publication; 1999 OSG 2-3.

4. Oxford American Dictionary and Thesaurus with Language Guide. New York: Oxford University Press; 2003.

5. Haq C, Steele DJ, Marchand L, et al. Integrating the art and science of medical practice: innovations in teaching medical communication skills. Fam Med. 2004;36(January suppl):S43-S50.

6. Wolff SB, Pescosolido AT, Druskat VU. Emotional intelligence as the basis of leadership emerges in self-managing teams. The Leadership Quarterly. 2002;13:505-522.

7. Goleman D. Working with emotional intelligence. New York: Bantam Books; 1998.

8. Fins JJ, Gentilesco BJ, Carver A, et al. Reflective Practice and Palliative Care Education: a Clerkship Responds to the Informal and Hidden Curricula. Acad Med. 2003;78:307-312.

9. Flowers LK, Brown L. Keys to success in pre-college programs. The Council

Journal, Opportunity Outlook, Council for Opportunity in Education. 2000 (Dec):17-20.

10. Thingujam NS. Emotional Intelligence: What is the Evidence? Psychological Studies. 2003;47:54-69.

11. Gardner H. Frames of mind: the theory of multiple intelligences. New York: Basic Books; 1983.

12. Gardner H. Intelligence reframed. Multiple intelligences for the 21st century. New York: Basic Books; 1999.

13. Goleman D. Emotional Intelligence. New York: Bantam Books; 1995.

14. Salovey P, Mayer JD, Caruso, D. The positive psychology of emotional intelligence. In: Synder CR; Lopez SJ, eds. Handbook of positive psychology. p. 159-171. London: Oxford University Press; 2002.

15. Wagner PW, Jester DM, Moseley GC. Use of the emotional quotient inventory in medical education. Acad Med. 2001;76:506-507.

16. Elam C, Stratton TD, Andrykowski MA. Measuring the emotional intelligence of medical school matriculants. Acad Med. 2001;76:507-508.

17. Yedidia MJ, Gillespie CC, Kachur, E, et al. Effect of communications training on medical student performance. JAMA. 2003;290:1157-1165.

18. Samar, AD. The relationship among emotional intelligence, self-management and glycemic control in individuals with type-1 diabetes. Dissertation Abstracts International: Section B: The Sciences & Engineering. 2001;624-B:1810.

19. Giordani B, Edwards AS, Segal SS, et al. Effectiveness of a formal post-baccalaureate pre-medicine program for underrepresented minority students. Acad Med. 2001;76:844-848.

20. Koenig JA, Sireci SG, Wiley A. Evaluating the predictive validity of MCAT scores across diverse applicant groups. Acad Med. 1998;73:1095-1106.

21. Tekian A, Han Y, Hruska L, et al. Do underrepresented minority medical students differ from nonminority students in problem-solving ability? Teach Learn Med. 2001;13:86-91.

22. Benbassat J, Baumal R, Borkan JM, et al. Overcoming barriers to teaching the behavioral and social sciences to medical students. Acad Med. 2003;78:372-380.

23. Swick HM, Szenas P, Danoff D, et al. Teaching professionalism in undergraduate medical education. JAMA. 1999;282:830-832.

24. Kruger J, Dunning D. Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. J Personality and Soc Psych. 1999;77:1121-1134.

25. Ullrich PM, Lutendorf SK. Journaling about stressful events: effects of cognitive processing and emotional expression. Ann Behav Med. 2002;24: 244-250.

26. Flowers LK, Delaney GMV. Dream Therapy. In: Aminoff M, Daroff RB, eds. Encyclopedia of Neurological Sciences. San Diego, CA: Academic Press; 2003:40-44.

27. Flowers, LK. The use of presleep instructions and dreams in psychosomatic disorders. Psychother Psychosom. 1995;64:173-77.

28. Delaney, GMV. All About Dreams. San Francisco, CA: Harper; 1998.

29. Flowers LK. The Dream Interview method in a private outpatient psychotherapy practice. In: Delaney G, ed. New Directions in Dream Interpretation. New York: SUNY Press; 1993. p. 241-288.

30. Wagner U, Gais S, Haider H, et al. Sleep inspires insight. Nature. 2004; 427:352-355.

31. White GL, Taytroe L. Personal problem-solving using dream incubation: Dreaming, Relaxation or Waking Cognition? Dreaming. 2003;13:193-209.

32. Brown Flowers LK. Psychotherapy: Black and White. J Natl Med Assoc. 1972; 64:19-22.

33. Novak DH, Volk G, Drossman DA, et al. Medical interviewing and interpersonal skills teaching in U.S. medical schools. Progress, problems and promise. JAMA. 1993;270:1319-1320.

34. Lichtstein DM, Materson BJ, Spicer DW. Reducing the risk of malpractice claims. Hosp Pract. 1999;34:69-72,75-76,79.

35. Cohen MH, Eisenberg DM. Potential physician malpractice liability associated with complementary and integrative medical therapies. Ann Intern Med. 2002;136:596-603.

36. Center C, Davis M, Detre T, et al. Confronting depression and suicide in physicians: a consensus statement. JAMA. 2003;289:3161-3166.

37. Abernathy AD. A mentoring program for underrepresented minority stu-

dents at the University of Rochester School of Medicine. *Acad Med.* 1999;74:356-359.

38. Humes E. No Matter How Loud I Shout—a year in the life of Juvenile Court. New York: Simon & Shuster; 1996.

39. Zull JE. The art of changing the brain. Enriching the practice of teaching by exploring the biology of learning. Sterling, VA: Stylus Publishing; 2003.

40. Flowers LK, Zweben JE. The Changing role of 'Using' Dreams in Addiction Recovery. *J Subst Abuse Treat.* 1998;15:193-200.

41. Flowers LK, Zweben JE. The Dream Interview Method in Addiction Recovery, A Treatment Guide. *J Subst Abuse Treat.* 1998;13:99-105.

42. Department of Health and Human Services (United States). Mental health: culture, race and ethnicity, a supplement to mental health. Rockville, MD: Office of the Surgeon General; 2001.

43. Baker FM. Comparison of blood pressure between Indiana AMA and NMA members. *J Natl Med Assoc.* 2003;95:1033-1041.

44. Avey H, Matheny KB, Robbins A, et al. Health care providers training, perceptions and practices regarding stress and health outcomes. *J Natl Med Assoc.* 2003;95:833-845.

45. Carroll LN, Allison-Ottey S. The joy is gone. Results of the NMA Gallup Survey of African-American Physicians. *J Natl Med Assoc.* 2004;96:419-433.

46. Hall FR, Mikesell C, Cranston P, et al. Longitudinal trends in the applicant pool for U.S. medical schools, 1974-1999. *Acad Med.* 2001;76:829-834.

47. Thomson WA, Ferry PG, King JE, et al. Increasing access to medical education for students from medically underserved communities: one program's success. *Acad Med.* 2003;78:454-459.

48. St. John W. Resolved: To do more. Or Less. Or Something. Guides to self-improvement can't agree on whether to go faster or slower on the road to happiness. *The New York Times.* 2005 Jan2; Sect. 9 (p1). ∎