In This Issue:

The Mind-Brain Problem, Epistemology, and Psychiatric Education
By Phillip R. Slavney, M.D.

Gay and Lesbian Issues in Residency Training at U.S. Psychiatry Programs
By Mark H. Townsend, M.D.
Mollie M. Wallick, Ph.D.
Karl M. Cambre, M.S.

The Journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry
In the past, procedural coding using the AMA's Physicians' Current Procedural Terminology (CPT) was a relatively simple matter. Today more and more patients are covered by insurance or health plans that require more detailed coding, documentation, and justification of services before health care providers can be paid. As practices have grown to include more treatment modalities and multiple sites of treatment (e.g., office, hospital, day hospital), the number of codes has also multiplied, increasing the probability of coding errors and disputes with third-party payers.

This handbook is designed to help practitioners become expert in procedural coding of psychiatric services in order to receive an accurate reimbursement and limit their audit liability.

CPT Handbook for Psychiatrists

- Provides psychiatry-specific coding information in a companion volume to AMA's CPT
- Includes the most recent changes in coding
- Describes in detail the Evaluation and Management codes
- Includes background information on the development, editorial process, and format of CPT
- Describes the relationship of the codes to the RBRVS system of reimbursement
- Suggests strategies for relating to third-party payers
- Includes common problems and strategies for coping with insurance carriers
- Includes a question-and-answer format section at the end of each chapter that addresses commonly asked questions about coding and related issues

“Understanding the intricacies of coding and reporting is essential to all psychiatrists, whether they be in private practice or working in institutional settings. CPT Handbook for Psychiatrists is timely and definitely recommended reading to all psychiatrists and their office staff.”

–Tracy Gordy, MD
Member, AMA CPT
Editorial Panel
CPT Liaison to the Relative Value Update Committee of the AMA

$19.50/Order #ADVR8650

To Order Call Toll-Free 1-800-368-5777
9 am - 5 pm EST, Monday - Friday
Managing Managed Care
A Mental Health Practitioner’s Survival Guide
Michael Goodman, MD, Janet Brown, RN, and Pamela Deitz, LCSW, MFCC

“This gem of a book fully lives up to its subtitle: ‘A Mental Health Practitioner’s Survival Guide’. The book is lucidly written and contains sufficient case examples to make the system readily adaptable to the individual clinician’s needs. Perhaps most important is that this system offers a rich data base for empirical research toward continued validation and the study of treatments and treatment programs. This book merits a place on every clinician’s shelf right beside DSM-III-R.”
—James T. Marsh, PhD
Professor Emeritus of Medical Psychology
University of California, Los Angeles

“Managing Managed Care: A Mental Health Practitioner’s Survival Guide is an excellent monograph that tries to rationalize this rationing process. It is an exceptionally clear articulation of the clinical rationale for recommending treatment and the convincing supportive evidence for the basis of those recommendations. Clinicians in hospital and office practice will appreciate this book immensely. The authors are interdisciplinary (psychiatry, nursing, and social work) with strong quality assurance backgrounds. They are to be congratulated for a superb contribution.”
—Steven S. Sharfstein, MD
President, Medical Director and Chief Executive Officer
Sheppard and Enoch Pratt Hospital
The Psychiatric Times, November 1992

This guide provides an easy-to-learn, easy-to-use system for communicating with external reviewers and documenting quality of care. The Patient Impairment Profile system guides the practitioner on how to document and communicate treatment needs, develop a rationale for treatment and a treatment plan, and predict the outcome of care. Managing Managed Care will prove indispensable to all mental health professionals whose treatment services may be subject to review prior to reimbursement.


To Order Call Toll-Free
1-800-368-5777
9 am – 5 pm EST, Mon – Fri

American Psychiatric Press Inc.
1400 K Street, N.W.
Washington, DC 20005
APPENDIX 1. OSCE case blueprint

KEYWORD DESCRIPTORS: Psychiatric evaluation and mental status examination of a young, depressed woman

SITUATION: This simulation requires the examinee to conduct a brief psychiatric evaluation and mental status examination on a patient presenting to an outpatient clinic. The examinee is introduced to “Jane Walton,” a 30-year-old, single woman who has asked for an emergency appointment.

POSSIBLE DIAGNOSES/PROBLEM STRUCTURE: Ms. Walton is depressed and suicidal. The situation requires the examinee to differentiate between depression and borderline syndrome (the most likely diagnosis), and to assess suicide risk.

DESIGNED FOR: Psychiatric residents

TIME REQUIRED: 40 minutes

OBJECTIVES TO BE TESTED:

Skills:
1. To conduct comprehensive psychiatric evaluations of outpatients with a broad spectrum of diagnoses, including patients of all ages and from different cultural backgrounds
2. To evaluate the need for psychiatric hospitalization, including evaluation of suicide or homicide potential and to facilitate admission to the hospital when appropriate
3. To assess family dynamics contributing to the patient’s distress

Attitudes:
1. To conduct oneself in a professional manner in terms of personal behavior and appearance
2. To demonstrate a positive attitude toward patients and families by considering a variety of values and behaviors in patients and see these within the social context

TASKS PRESENTED TO EXAMINEE: The examinee is told that Ms. Walton, previously unknown to the outpatient service, has requested an emergency appointment. The examinee has 20 minutes to evaluate the patient and determine a proper disposition for her.

CRITICAL ELEMENTS AND METHODS OF EVALUATION: The simulated (standardized) patient is trained to use a checklist to rate critical elements of the interview (see Appendix 2).
## APPENDIX 2. Patient feedback form

<table>
<thead>
<tr>
<th>Resident</th>
<th>Date</th>
<th>Patient/Evaluator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### How Done

<table>
<thead>
<tr>
<th>Not</th>
<th>Poor</th>
<th>Ok</th>
<th>Well</th>
<th>Superb</th>
</tr>
</thead>
</table>

**The Resident:**

1. introduced him/herself; explained his/her role  
2. took sufficient time at the beginning to help me feel relaxed  
3. asked open-ended questions that permitted me to tell my story  
4. asked me questions I could understand and answer  
5. listened carefully to what I said  
6. usually looked directly at me when he/she spoke with me  
7. provided reinforcement by gestures such as head nodding, smiling, and verbal responses  
8. answered my questions adequately  
9. was pleasant and courteous  
10. was easy to talk to  
11. gave me a sense of confidence; I had confidence in this person  
12. gave me a good feeling about him/her, very likable  
13. seemed very skilled and confident in examination  
14. summarized information gathered to give me a chance to clarify or present additional information  
15. clearly informed me of his/her recommended treatment plan  
16. discussed the alternatives to the recommended treatment plan available to me  
17. gave me the opportunity to make a clear decision to accept or reject the treatment plan offered or its alternatives  
18. supported my decision to consent to or refuse the offered treatment plan  
19. gave a closing statement that provided a comfortable ending to the interview  

### Overall Assessment:

20. I would come to see this person again  
21. I would comply with any treatment or recommendations from this person

### Additional Comments:
APPENDIX 3. Checklist write-up

<table>
<thead>
<tr>
<th>EXAMINEE: ___________________</th>
<th>EVALUATOR: ___________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE: ________________________</td>
<td></td>
</tr>
</tbody>
</table>

1. The psychiatric history recorded the following elements accurately:
   a. Presenting complaint
   b. Present illness
      - onset of depression
      - duration of symptoms
      - type of sleep disturbance
      - appetite and weight
      - associated symptoms of depression
      - anxiety
      - relationships with others
      - relationships with parents
   c. Present illness: suicide ideation/risk
   d. Family history
      - Family history of mental illness
   e. Past history
      - social history
      - occupational history
      - medical history
      - past psychiatric history

2. The mental status examination included the following elements:
   - Patient cooperative
   - Patient well-dressed
   - Stream of talk coherent and logical
   - Patient is anxious
   - Patient's mood mildly depressed
   - Affect variable but appropriate
   - Patient cries
   - Patient denies hallucinations or delusions
   - Patient is oriented
   - No memory deficit noted
   - Insight limited
   - Judgment intact

3. The differential diagnosis included the following conditions:
   - Major depression
   - Dysthymic disorder
   - Adjustment disorder with depressed mood
   - Borderline personality disorder
   - Avoidant personality disorder

4. The most likely diagnosis chosen was:
   - Borderline personality disorder

5. The initial treatment plan included the following elements:
   a. Plan to get further information
      - Contact with family member
      - Psychological testing
      - Report from primary care physician
   b. Medications
      - Benzodiazepine
      - Rationale for no drug use
   c. Return appointment within 1 week
   d. Patient education
      - How to reach M.D. for emergency
APPENDIX 4. Rating and decision strategy: checklist for write-up

Item 1a must be present
Item 1b: 6 of 8 is an acceptable level of performance
Item 1c must be present
Item 1d must be present
Item 1e: 2 of 4 is an acceptable level of performance
Item 2: 8 of 12 is an acceptable level of performance (must include description of mood)
Item 3: 4 of 5 is an acceptable level of performance
Item 4 must be present
Item 5a: 1 of 3 must be present
Item 5b: 1 of 2 must be present
Item 5c must be present
Item 5d must be present
SPECIAL ARTICLE

59 The Mind-Brain Problem, Epistemology, and Psychiatric Education
Philipp R. Slavney, M.D.

REGULAR ARTICLES

67 Gay and Lesbian Issues in Residency Training at U.S. Psychiatry Programs
Mark H. Townsend, M.D., Mollie M. Wallick, Ph.D., Karl M. Cambre, M.S.

73 Gender Differences in Faculty Retention and Rank Attainment in Academic
Departments of Psychiatry
Ellen Leibenluft, M.D., Mark G. Haviland, Ph.D., Thomas H. Dial, Ph.D.,
Carolyn B. Robinowitz, M.D.

77 Correlates of Psychiatry Grand Rounds Attendance
Mark E. Kunik, M.D., Shirley G. Merritt, M.D., Lynnda M. Dahlquist, Ph.D.,
David Marks, B.A.

84 Development of Junior Faculty in Resource-Poor Departments of Psychiatry
Yogesh Bakhai, M.D., Uriel Halbreich, M.D.

91 Medical Students’ Attitudes Toward A State Hospital
Anthony L. Pelonero, M.D., William T. Ferriss, L.C.S.W.

NEW IDEA

95 Using the Objective Structured Clinical Examination in a Psychiatry Residency
Earl L. Loschen, M.D.

Q AND A

105 Frequently Asked Questions About the Residency Review Committee
Stefan Stein, M.D.
EDUCATIONAL ABSTRACTS

Abstracted by Dorthea Juul, Ph.D.

109 Problem-based learning: a review of literature on its outcomes and implementation issues

110 Assessment measures in medical school, residency, and practice: the connections

111 Surgery resident selection and evaluation: a critical incident study

LETTERS

112 Attending Psychiatrists' vs. Residents' Knowledge of Geriatric Depression
F. M. Baker, M.D., M.P.H.

113 The Postresidency Perspective of the Psychiatric Chief Resident
Martin P. Szuba, M.D., Barry H. Guze, M.D., Steven H. Richeimer, M.D.

DEPARTMENT

116 Information for Contributors
The Mind-Brain Problem, Epistemology, and Psychiatric Education

Phillip R. Slavney, M.D.

The mind-brain problem is the fundamental mystery in psychiatry and the chief obstacle to a coherent curriculum for its students. Rather than acknowledge the problem as a source of ambiguity and discord, some educators have attempted to abolish, finesse, or ignore it. An alternative to these tactics is found in the epistemological approach taken by Karl Jaspers and others, which seeks to determine what we know and how we know it. Educational programs based on such an approach seem more likely than others to produce students who are broad-minded, tough-minded, and fair-minded.

The mind-brain problem is the fundamental mystery in psychiatry and the chief obstacle to a coherent curriculum for its students. We know that mind and brain are related, but we cannot account for one in terms of the other. Synthetic explanations from the neuron up and reductionistic analyses from the thought down do not meet. Instead, they leave a gap so wide that the most meaningful characteristic of mental life, its subjective sense of self, appears disconnected from the objectively demonstrated dependence of that self on the brain. We can sometimes correlate the occurrence of mental events with neural processes, but the transformation of the latter into the former is unexplained. Thoughts and moods as experienced by the subject remain isolated from our knowledge of synapses and transmitters.

Mind and brain can neither be fully integrated nor completely separated—a fact that has had important consequences for educational programs in psychiatry (1).

ABOLISHING THE MIND-BRAIN PROBLEM

The major academic challenge presented by the mind-brain problem is how to ground a curriculum in a discipline that is inherently ambiguous. Which sources of knowledge, which methods of reasoning, should be fundamental to our teaching? A traditional way of responding to this challenge has been to end the ambiguity by fiat: to declare that the proper focus of psychiatric education is the brain and its diseases or the mind and its disquiets. The first of these stances (“brain” psychiatry) emphasizes scientific explanation and approaches the patient as an object/organism; the second (“mind” psychiatry), emphasizes meaningful understanding and approaches the patient as a subject/agent. Both positions have been championed over the last century, but in recent decades brain psychiatry has supplanted mind psychiatry as an educational premise for many academic leaders in the United States (2). Thus, Michael Taylor accepts as axiomatic the proposition “that all

Dr. Slavney is professor and director for education, Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine. Dr. Slavney is also deputy editor of Academic Psychiatry. Address reprint requests to Dr. Slavney, Meyer 4-181, The Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21287-7481.
Copyright © 1993 Academic Psychiatry.
mental events (dreams, desires, hopes, thoughts, loves, and hates) and all behaviors (interpersonal or otherwise) are expressions of neurobiologic processes" (3, p. 2). He proposes, in consequence, that the essential curriculum in psychiatry ought to be "primarily biological" and that students who wish to learn about psychodynamic theory and practice should do so in a postresidency fellowship (4). Indeed, because Taylor believes that "the brain is the organ of the mind, and that mental illness is as biological as illness in any other organ system," he calls for a "true rapprochement between psychiatry and neurology (joint residency training and fellowships, joint subspecialty board certification, and combined clinical and research programming)" (5, p. 238).

The abolition of ambiguity by fiat (whether in favor of mind or brain) makes teachers and students more confident, if only because they have less to worry about. Educators who would restrict discourse in psychiatry to the scientific explanation of brain diseases, for example, might employ the following syllogism as a basis for teaching:

**Major Premise:** Physicians treat diseases.
**Minor Premise:** Psychiatrists are physicians.
**Conclusion:** If the patient’s complaints are not due to a disease of the brain, or what looks as if it will turn out to be a disease of the brain, then the treatment of those complaints is not a matter for psychiatrists, but for psychologists, social workers, and nurses.

An equally confidence-building (if currently unfashionable) proposal could be made by psychiatrists who would limit discourse to the meaningful understanding of mental distress: "If there is something wrong with the patient’s brain, he needs to see a neurologist—they are the people who look after the nervous system." Both arguments are inadequate for grounding a curriculum in psychiatry because they are based on the mistaken notion that patients can be regarded as object/organisms or subject/agents, that scientific explanation or meaningful understanding is sufficient for our work.

FINESSING THE MIND-BRAIN PROBLEM

Another traditional way of dealing with psychiatry's inherent ambiguity avoids these errors. It recognizes that patients are object/organisms and subject/agents and therefore regards scientific explanation and meaningful understanding as essential to the education of psychiatrists. This approach began with Adolf Meyer’s concept of "psychobiology" (6,7) and is most widely known today through George Engel’s advocacy of a biopsychosocial curriculum (8).

Engel argues that the dominant philosophy in contemporary medicine is dualistic, reductionistic, and materialistic, and that it has proven unsatisfactory because it “leaves no room within its framework for the social, psychological, and behavioral dimensions of illness” (7, p. 130). He believes that general systems theory should serve as the basis for a new medical curriculum; this curriculum would include sources of information about illness and treatment that are neglected, even by psychiatrists. The theory proposes a hierarchical continuum of natural systems, each of which must be studied both for its own properties and for the contribution it makes to other levels of organization. Engel’s biopsychosocial model designates the following systems for study: subatomic particles, atoms, molecules, organelles, cells, tissues, organs/organ systems, nervous system, person, two-person, family, community, culture-subculture, society-nation, biosphere (9). Psychiatrists concentrate on the person level of this continuum, but should remember that, in systems theory, “all levels of organization are linked to each other in a hierarchical relationship so that change in one affects change in the others” (7, p. 134).
This approach has many appealing features, but it also has several disadvantages when taken as the basis for a curriculum. Although it acknowledges psychiatry's ambiguity, the biopsychosocial approach finesse the mind-brain problem. In the hierarchy described above, the transition between nervous system and person is represented as similar to that between atoms and molecules or two-person and family, yet in crossing the boundary between nervous system (brain) and person (mind) there is a kind of discontinuity not present in the other transitions. When moving from brain to mind we move from the realm of matter to the realm of meaning, from the world of bodies to the world of selves. Engel does not identify this discontinuity as a major impediment to the type of integration promised by systems theory, and he gives it only implicit recognition when he says: "In no way can the methods and rules appropriate for the study and understanding of the cell as cell be applied to the study of the person as person or the family as family" (9, p. 536).

A related problem with the biopsychosocial approach as presented by Engel is that it does not illuminate the shortcomings of meaningful understanding as clearly as it does those of scientific explanation. This is important because meaningful understanding informs much of our knowledge at and above the level of person in the system hierarchy. The "discovery" of an unconscious conflict does not have the same epistemological status as the discovery of a mutant gene. Scientific explanation and meaningful understanding are both formal ways of knowing, and each must be appreciated for its weaknesses as well as its strengths (10,11).

Although an advantage of the biopsychosocial approach over brain psychiatry and mind psychiatry is that it considers many sources of information, the extent and apparent equivalence of those sources may increase ambiguity rather than lessen it. Because "all levels of organization are linked to each other...so that change in one affects change in the others," how can a student be sure that he or she is taking the right direction up or down the hierarchy for the task at hand? As Michael Schwartz and Osborne Wiggins put it:

The model is sufficiently vague so that, in principle, any and every aspect of human life might be incorporated. With any particular patient, of course, only a limited number of factors will play a role...but the biopsychosocial model offers no help in delimiting and circumscribing them. ... The biopsychosocial model provides no guidance in locating and specifying the relevant variables. The physician who adopts it thus incurs the obligation to take the broad view and consider multiple possibilities, but the possibilities remain undefined and endless. (12, p. 335–336)

IGNORING THE MIND-BRAIN PROBLEM

Another approach to psychiatry's ambiguity has been to ignore it—to leave the mind-brain problem unacknowledged. (Behaviorism could be said to ignore the mind-brain problem, but it will not be examined here because it has rarely served as the basis for organizing a curriculum in psychiatry.) It is not difficult to find contemporary textbooks, even those which set out to be comprehensive, that have no index entries for mind or that list the term only in reference to psychoanalytic theory or psychosomatic disorder. Such textbooks, which may discuss meaningful issues at length, do not represent brain psychiatry as described above; but neither do they consider the mind-brain problem important enough to mention, let alone regard it as the fundamental mystery in our field.

Avoiding the issue may have become easier for teachers and students in the United States since publication of the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III). The authors of DSM-III proposed a classification that is clini-
ical in nature because in most psychiatric illness “the etiology is unknown” (13, p. 6). This modest admission of ignorance after years of contentious, and sometimes wholly mistaken, claims about etiology by certain brain psychiatrists and mind psychiatrists is not without its critics (14,15), but the manual has had a major impact on educational programs in North America (16,17). Although DSM-III’s agnosticism about cause has had a desired effect in muting sectarian controversy, it may also have produced an unintended consequence: neglect of the mind-brain problem. Because this neglect does not constitute an educational philosophy, I cannot cite academic leaders who endorse it, but I believe that, in some programs, the stance taken by DSM-III has become the stance of the curriculum. If learning psychiatry is equated with mastering DSM-III, students may never understand why the manual took the form it did. The denominational conflicts DSM-III hoped to avoid are derived, in large part, from the mind-brain problem.

It is quite appropriate to organize textbooks around a classification of clinical phenomena, but DSM-III, for all its utility, is not the best way to ground a curriculum and provide confidence in the face of ambiguity. On the one hand, having a large number of generally accepted diagnostic categories may give the impression that much is certain (at least until the next edition of the manual). Even terms such as atypical and not otherwise specified contribute to the sense that every illness has its place in a coherent system. On the other hand, thoughtful students will soon have their confidence shaken as they wonder how all these “disorders” are related to one another, especially when they discover that, in DSM-III, “there is no assumption that each mental disorder is a discrete entity with sharp boundaries...between it and other mental disorders, as well as between it and No Mental Disorder” (13, p. 6). What seemed so clear at first may now appear more uncertain—and arbitrary—than ever. When psychiatric education is disconnected from an understanding of the mind-brain problem, students in search of confidence may become partisans of either brain psychiatry or mind psychiatry, or they may, when confronted with the complexity of the biopsychosocial model, doubt that psychiatrists can ever be sure of what they know and how they know it.

**HOW EPISTEMOLOGY HELPS**

Determining what we know and how we know it may be the best way to ground a curriculum in a discipline that ought not to abolish, finesse, or ignore the mind-brain problem. Scientific explanation and meaningful understanding are both essential methods of reasoning in psychiatry, yet they have different assumptions, observations, and outcomes. Although the tension between these two ways of knowing has long been recognized (11), it acquired special relevance for our field around the turn of the century, when both brain psychiatry and mind psychiatry were being enthusiastically defended. As E. E. Southard put it in 1912: “Tangles and twists in the mind appealed to some: blots and spots in the brain appealed to others” (18, p. 233).

Karl Jaspers recognized the dangers of excessive reliance on a single method of reasoning. He believed that many theorists do not appreciate the limits of their approach, with the result that exaggerated claims are made. Thus, although he credited Karl Wernicke and Sigmund Freud with important contributions to psychiatry, Jaspers also criticized their methodological naivete:

Wernicke started with his theory from the “outside,” with the brain. Freud on the other hand started with his theory from the “inside,” with what is psychically understandable. Both review a whole field of facts and both generalize what has only a circumscribed validity and apply it over the whole realm of psychopathology and psychology; both end in abstract construc-
tions. They are complete opposites as regards the content of their study and interests; Wernicke looked for an absolute without meaning, a product of brain processes, while Freud tried to understand almost all psychic disturbances entirely from within; yet their two modes of thought are structurally related. They are indeed opposites but on the same plane and with the same limitations and restrictions on their thinking. (10, p. 546)

Jaspers argued that reasoning in psychiatry should be both pluralistic and epistemological because human experience ("reality") is both complex and ambiguous. He was aware, however, that simple theories, confidently (and often uncritically) proposed, can have great appeal:

If... we have some theory of reality to go by, the classification of our knowledge appears much easier. A few principles and basic factors will then afford us a comprehensible whole... Hence the often transitory success of attractive theoretical systems in which [reality] seems to be completely comprehended, and every newcomer gets a grasp of the whole very quickly, feeling that he has reached the heart of reality straightaway. All he need do is repeat, confirm, apply and elaborate. A more difficult process, but a truer one, is this process of classifying by method. This is neither attractive nor particularly comfortable; it cannot be done quickly and there is no immediate grasp of the whole; it is however a scientific exercise. It will stimulate research and further one's abilities. We can see clearly how far we have got, and what certain methods will tell us. (10, pp. 43–44)

Jaspers believed that knowledge is both rooted in and limited by our methods of reasoning. His 1913 text, General Psychopathology (the seventh edition of which was translated into English in 1965), examines what we know in psychiatry and how we know it. For Jaspers there were no simple answers to these questions because human experience is complex and ambiguous. With his approach we derive as much confidence from learning what our methods fail to reveal as we do from learning what they illuminate.

If Wernicke and Freud were ultimately unsuccessful in providing a basis for psychiatric education because they focused on single methods of reasoning, it is also possible to be unsuccessful by not focusing on any method. This tendency is seen today in a kind of superficial eclecticism that is mainly concerned with what works and that ignores conceptual issues almost entirely. According to Robert Simon, eclecticism of this type is merely a series of technical maneuvers and "cannot be differentiated from dilettantism—the position of knowing nothing and accepting everything" (19, p. 135). My point here is not that clinical results are unimportant, but rather that epistemological ignorance can be stultifying. A student who is not educated to think critically about the ideas of others may never think critically about his own. Although Engel cautions against this danger (9), his biopsychosocial model is itself often used in the eclectic way described above, focusing on what we know and neglecting how we know it. This, too, is inadequate for grounding a curriculum in psychiatry. In order to accomplish that task we need a Jasperian outlook: pluralistic and epistemological.

Several psychiatric educators in the United States have taken just such an approach. Among its more concise presentations are those by Aaron Lazare and Joel Yager. Lazare proposes four conceptual models or perspectives in psychiatry (biologic, psychodynamic, behavioral, and sociocultural) (20), each of which has particular characteristics as a method of reasoning and none of which "offers a complete explanation for the phenomena to which it addresses itself. Each model by its very definition ignores a universe of phenomena that are important in the patient's life and function" (21, p. 350). In Yager's version of the pluralistic, epistemological approach, each
perspective "performs two functions for the clinician: it organizes inquiry, observations, and understanding and simultaneously limits the field of vision. . . . [Each perspective serves] as a filter that, while selectively sharpening . . . focus on some areas, selectively excludes others" (22, p. 736). Both Lazare and Yager recommend that the methods of reasoning employed in psychiatry be studied as such by students of the field.

This last point is more thoroughly developed in the work of Leston Havens, for whom "the central questions concern what has been discovered and what methods were used to make the discoveries" (23, pp. 4–5). Havens examines "objective-descriptive" psychiatry, psychoanalysis, existential psychiatry, and interpersonal psychiatry as systems of reasoning rather than as techniques of treatment or theories of human nature. Havens wants a pluralistic discipline but warns against eclecticism without epistemology:

Usually [eclecticism] has meant grasping the ideas of all the schools and taking from them those most appealing to us. It has usually not involved the much more taxing matter of mastering all the methods of the schools and discerning when to use them. Eclecticism has tended to underplay differences, to homogenize complexities, so that the powerful school methods and ideas lose their edge. (23, p. 330)

Much the same concern for epistemological rigor led Paul McHugh and me to emphasize the mind-brain problem as the source of psychiatry's ambiguity, to review the distinctions between scientific explanation and meaningful understanding, and to propose that psychiatrists reason about clinical issues in terms of four perspectives: diseases, dimensions of personality, goal-directed behaviors, and life stories (1,24). These perspectives employ different axioms, follow different logics (25), and promise different results. Each illuminates particular aspects of illness, but only those aspects, and none is sufficient to comprehend the field as a whole. In our view, the best way for students to achieve a realistic level of confidence is to appreciate the strengths and weaknesses of psychiatry's methods. Knowing what we know and how we know it is important, but so is knowing what we do not know, and why.

TEACHING PSYCHIATRIC EPISTEMOLOGY AT JOHNS HOPKINS

The curriculum in psychiatry for medical students and residents at Johns Hopkins is based on The Perspectives of Psychiatry (24) and Psychiatric Polarities (1), both of which introduce (though in different ways) the mind-brain problem and its epistemological consequences. The first-year medical student course, for example, takes its structure from The Perspectives of Psychiatry and therefore considers reasoning in terms of diseases, dimensions, behaviors, and life stories. The initial lecture in the course poses the mind-brain problem for our discipline, and in the discussion that follows it is quickly apparent that some members of the class are defenders of the mind or champions of the brain. In succeeding weeks, these students and their less partisan classmates are asked to reflect on what they know of mental life and how they know it. As they learn about various perspectives in psychiatry they come to see that each brings a certain type of knowledge and that each is important to the field.

The characteristics and operations of perspectives we regard as fundamental are presented in a series of readings, lectures, patient interviews, case descriptions, and small-group tutorials. The first lecture on disease-reasoning, for example, states the method's central assumption—that illness is due to an abnormality in the structure or function of a bodily part—and reviews its usual progression from the recognition of clinical syndromes to the identification of pathological disease entities to the discovery
of etiological agencies. Subsequent lectures examine, among other things, the issues of reliability and validity in clinical assessment; what is known (and not known) about the neural basis of capacities such as memory and mood; how damage to the brain can disrupt those capacities in stereotyped ways; and what that disruption means to patients with conditions (e.g., dementia, bipolar disorder) for which disease-reasoning seems appropriate. These subjects are further discussed in weekly tutorials, and the advantages and disadvantages of reasoning about psychiatric disorders from the disease perspective are explored. A similar approach introduces the other perspectives and illustrates how they reveal normal and abnormal phenomena of interest to physicians. Topics including intelligence and mental retardation are discussed as dimensional concepts; eating and anorexia nervosa as behaviors; and aging and demoralization as themes in a life story. Students are tested on their factual knowledge with short-answer and multiple-choice questions, and on their ability to apply the perspectives with essay questions, some of which are prompted by case descriptions. Such essays might require students to contrast the disease perspective and the behavior perspective as ways of accounting for alcoholism; to assess possible contributions of "nature" and "nurture" to the development of antisocial traits; or to apply different types of life-story reasoning (e.g., psychoanalytic, existential) to the same patient's illness.

CONCLUSION

The curriculum sketched above is but one way to introduce the mind-brain problem and its implications for psychiatry. Educators who attempt to abolish, finesse, or ignore that problem deprive their students of a chance to confront the mystery that makes our discipline among the most interesting of all intellectual endeavors. Although these tactics may be attractive in the short run, in the long run they contribute to a proliferation of "orientations" whose adherents are disdainfully ignorant of one another's methods. A concern with epistemology does not resolve psychiatry's ambiguity, but it does help produce a discipline in which students are encouraged to be broad-minded, tough-minded, and fair-minded.

The author thanks Mitchell Cohen, Peter Rabins, and Jacqueline Slavney for their suggestions.

References

6. Meyer A: Objective psychology or psychobiology with subordination of the medically useless contrast of mental and physical. JAMA 1915; 65:860–862
13. Spitzer RL: Introduction, in Diagnostic and Statisti-
Gay and Lesbian Issues in Residency Training at U.S. Psychiatry Programs

Mark H. Townsend, M.D.
Mollie M. Wallick, Ph.D.
Karl M. Cambre, M.S.

The authors conducted a survey that explored the training milieu of gay and lesbian psychiatric residents at various sites throughout the United States. In some ways, the residents surveyed have greater institutional support than was found in an earlier study of homosexual medical students. But there are clear and disturbing differences among residents based on gender, with men more likely than women to consider their program supportive of their sexual orientation. In spite of this relative advantage, gay men and lesbians, medical students and residents alike, would prefer that their training institutions be more supportive of their sexuality and more adept at facilitating sensitive care of homosexual patients.

Our previous study (1) assessed current programs directed toward gay and lesbian medical students and identified the students' perceptions, needs, and wishes. We found that support services are limited and that existing services vary on the basis of institutional affiliation, class size, and geographic region. Gay and lesbian students were dissatisfied with the way the subject of homosexuality is taught and, in general, were frustrated by their current medical school experience. But the students appeared optimistic that meaningful change is possible with administrative cooperation.

Are gay and lesbian issues addressed in a more considered and comprehensive way in psychiatric residency than in medical school? Are more social/support services available? Are residents more forthcoming about their sexual orientation? Do increased opportunities exist for heterosexual residents to conceptualize the treatment of gay and lesbian patients and to understand the lives of their homosexual colleagues? To answer these questions, we conducted a survey to explore the training milieu of gay and lesbian psychiatric residents at various sites throughout the United States.

METHODS

One of us (M.H.T.) devised a questionnaire covering resident perceptions in such areas as social/support groups for homosexual residents; how the subject of homosexuality is addressed in the residency; disclosure of sexual orientation to residents, faculty, and patients; and the program's stance toward gay and lesbian sexuality. The questionnaire...
was circulated at the 1991 meeting of the American Psychiatric Association (APA) to resident members of the Association of Gay and Lesbian Psychiatrists (AGLP), which meets annually in conjunction with APA as an allied group. Formed in 1978, AGLP is one of two national gay and lesbian physicians’ groups. With just over 400 members, of whom 68 are currently in training in U.S. psychiatry programs, AGLP is the only organized, officially recognized gay and lesbian specialty group known to us. Resident members of AGLP were invited to share a questionnaire with other nonmember gay or lesbian residents in psychiatry. No other method of contacting self-identified homosexual residents was available.

RESULTS

Distribution at APA and a subsequent mailing to resident AGLP members resulted in 80 responses, with 21 from women. Responses were received from 44 different programs in 21 states and the District of Columbia, with most from New York (21%) and California (18%). As to geographic region, most individual responses were from the Northeast (43%), followed by the West and South (27% and 24%, respectively), with the fewest from the North Central region (6%). The geographic distribution of programs was as follows: Northeast, 43%; South, 30%; West, 16%; and North Central, 11%. Twenty-nine programs were represented by a single respondent and another seven by 2 respondents; the maximum number from any single program was 8 responses from an institution in the West. The number of responses increased appreciably with the residents’ level of training: PGY-1 residents represented 13%; PGY-2, 20%; PGY-3, 21%; and PGY-4, 46% of responses.

Anonymity of respondents was assured, with residency program the only solicited identification. Almost half of the subjects (n = 39) were from programs affiliated with public medical schools; 28 subjects were associated with private medical schools and 13 with free-standing hospitals. Roughly half of the respondents (n = 39) reported their program’s theoretical orientation as biological, whereas 35 considered their program psychoanalytic and 6 reported an eclectic orientation.

Findings Related to Undergraduate Education

In comparing the experience of medical students and psychiatry residents, both gay and lesbian students from all geographic regions and institutional affiliations were almost twice as likely to have a support group specifically targeted toward them (56% vs. 30%, \[\chi^2 = 9.78, df = 1, P = 0.002\]). In the absence of such a group, medical students were more likely than their resident counterparts to express desire for a gay-focused group. Conversely, psychiatric residents in both public and private institutions reported greater availability of faculty with whom to discuss gay and lesbian issues (81% vs. 60%, \[\chi^2 = 8.24, df = 1, P = 0.004\]). Whereas the medical students’ perception was that the subject of homosexuality is taught mainly within human sexuality courses (41% of residents vs. 73% of students), residents reported exposure to the topic most often in case conferences (57% of residents vs. 41% of students). Noteworthy is the fact that 10% of medical students and 29% of residents reported the subject’s total absence in any format in their curriculum.

Other trends were noted in comparing graduate and undergraduate education. As was true of students, residents from a large program were more likely to have both a homosexual support group in their program and access to a group in the community. (“Large” and “small” programs were defined in the study as those with more and fewer residents, respectively, than the mean of the sample’s total program size, 39.2 residents.) Similarly, availability of faculty with whom to discuss gay issues was reported
more frequently in the Northeast by both students and residents; access to a community group was once again reported more often in the Northeast and West and less often in the North Central region and in the South. Finally, existence of a homosexual residents' group was reported more frequently in the Northeast and West, yet again a pattern similar to that previously reported by students.

Findings Specific to Residency

Of particular interest in the current study is the subjects' perception of their program's stance toward gay and lesbian sexuality, along with the complex variables involved in their disclosure of orientation to fellow residents, faculty, and patients.

Respondents categorized their program's stance toward homosexuality as follows: 21% as a pathologic condition, 41% as a normal state, and the remainder as neutral. In response to our question about whether their sexuality enhanced their career in psychiatry, half the respondents (n = 40) reported affirmatively; 7 respondents considered their orientation a detriment, and the remainder reported its lack of effect on their career.

Most gay and lesbian residents (92%) reported that they had disclosed their sexual orientation to at least one other resident, whether heterosexual or homosexual; further, 69% reported coming out to their entire cohort and 42% to their entire residency. More than half (60%) reported the presence of an openly gay faculty member. Regarding coming out to faculty, most (89%) reported disclosure to at least one member, 56% to their residency director, 24% to their departmental chair, and 21% to the entire faculty. Many (43%) reported an ability to discuss gay issues with their training director, while fewer (21%) felt comfortable discussing such issues with their departmental chairperson.

In regard to psychotherapy supervision, less than one-third of residents (n = 25) reported the availability of an openly gay supervisor. Only two respondents reported a gay-focused peer supervision group, whereas 77% of those without this type of group expressed a desire for one.

No significant response differences were noted between those from programs considered analytically oriented by the respondents and those considered biological. Rather, it appears that the gender of the respondents significantly influenced many of their responses (Table 1). Men were more likely than women to disclose their orientation to their chairperson (χ² = 5.05, df = 1, P = 0.025), to know of an openly gay or lesbian faculty member (χ² = 5.44, df = 1, P = 0.02), to discuss homosexual issues with their training director (χ² = 15.13, df = 1, P = 0.024) or with another faculty member (χ² = 11.86, df = 1, P = 0.001), and to report that their program considered homosexuality a normal condition (χ² = 12.19, df = 2, P = 0.002). Regarding support groups, men were more likely to report the presence of a group for gay and lesbian psychiatric residents at their program (χ² = 4.49, df = 1, P = 0.034) or in their community (χ² = 6.00, df = 1, P = 0.014). Men also reported more often that their orientation was in some way an asset to their career (χ² = 5.31, df = 2, P = 0.007).

Other significant patterns emerge from questions concerning resident disclosure to patients. Almost a third of the respondents (24 of 80) reported such disclosure, with a dramatic increase as residency training progressed (χ² = 16.2, df = 3, P = 0.001). As would be expected, both gay and lesbian residents were more likely to disclose to homosexual than to heterosexual patients; (χ² = 16.8, df = 1, P < 0.001); it is of interest that there was no significant difference by gender in disclosure rates to lesbians and gay men (see Table 1).

Overall, gay men responded in a more clearly positive way than lesbians on 14 of 26 inquiries dealing with issues of disclosure, the availability of gay and lesbian peers and of group support, and perceptions concern-
ing their sexual orientation. As reported in Table 1, only in one area, disclosure to lesbian patients, did lesbian residents respond more affirmatively than did their gay male colleagues.

**DISCUSSION**

An inherent flaw of the research was our limited ability to contact homosexual residents. We acknowledge a potential bias in

<table>
<thead>
<tr>
<th>TABLE 1. Gender differences in psychiatric residents' responses</th>
<th>% Positive Response</th>
<th>Number Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Disclosure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To colleagues in residency training program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To a gay resident</td>
<td>93.1</td>
<td>89.5</td>
</tr>
<tr>
<td>To a straight resident</td>
<td>93.1</td>
<td>90.5</td>
</tr>
<tr>
<td>To entire PGY cohort</td>
<td>69.0</td>
<td>70.0</td>
</tr>
<tr>
<td>To entire residency group</td>
<td>42.4</td>
<td>42.1</td>
</tr>
<tr>
<td>To faculty in residency training program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To at least one faculty member</td>
<td>87.9</td>
<td>90.5</td>
</tr>
<tr>
<td>To training director</td>
<td>60.7</td>
<td>42.9</td>
</tr>
<tr>
<td>To chairman</td>
<td>30.9</td>
<td>5.3</td>
</tr>
<tr>
<td>To entire faculty</td>
<td>25.1</td>
<td>14.3</td>
</tr>
<tr>
<td>To patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To at least one patient</td>
<td>28.8</td>
<td>33.3</td>
</tr>
<tr>
<td>To a male heterosexual</td>
<td>30.0</td>
<td>0.0</td>
</tr>
<tr>
<td>To a female heterosexual</td>
<td>30.0</td>
<td>14.3</td>
</tr>
<tr>
<td>To a gay male</td>
<td>80.0</td>
<td>83.3</td>
</tr>
<tr>
<td>To a lesbian</td>
<td>63.2</td>
<td>83.3</td>
</tr>
<tr>
<td>Availability of gay/lesbian (G/L) peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>An openly gay faculty member at program</td>
<td>67.2</td>
<td>38.1</td>
</tr>
<tr>
<td>An openly gay psychotherapy supervisor</td>
<td>30.5</td>
<td>33.3</td>
</tr>
<tr>
<td>Faculty members with whom to discuss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G/L issues</td>
<td>89.8</td>
<td>57.1</td>
</tr>
<tr>
<td>Training director</td>
<td>50.9</td>
<td>21.1</td>
</tr>
<tr>
<td>Chairman</td>
<td>25.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Availability of support for G/L residents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social support group for G/L psychiatry residents at residency</td>
<td>28.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Social support group for G/L psychiatry residents in community</td>
<td>45.8</td>
<td>15.0</td>
</tr>
<tr>
<td>Social support group for all G/L residents at residency institution</td>
<td>22.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Social support group for all G/L residents in community</td>
<td>41.4</td>
<td>26.3</td>
</tr>
<tr>
<td>G/L peer supervision group for psychiatry residents at residency</td>
<td>3.5</td>
<td>0.0</td>
</tr>
<tr>
<td>G/L peer supervision group for all residents in community</td>
<td>12.5</td>
<td>10.5</td>
</tr>
<tr>
<td>G/L physicians' group that welcomes residents</td>
<td>59.7</td>
<td>50.0</td>
</tr>
<tr>
<td>Perceptions concerning sexual orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program's stance toward orientation</td>
<td>52.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Effect of orientation on career</td>
<td>55.9</td>
<td>33.5</td>
</tr>
</tbody>
</table>

*P < 0.05.

**P < 0.10.**
terms of positive experience: it would seem that the more identity-conflicted or isolated the resident, the less the chance of a survey response. This limitation applied, as well, to our earlier study of lesbian and gay medical students, who also varied in their ability to disclose their orientation within the medical school milieu.

The results of the current study underscore both similarities and differences between the experiences of gay and lesbian residents and their medical student counterparts. The fact that many more residents than students reported that the subject of homosexuality was absent in their curriculum is troubling. Perhaps this deficiency could be addressed by wider distribution of the model curriculum on homosexuality prepared by the Committee on Gay, Lesbian, and Bisexual Issues of the American Psychiatric Association (T. S. Stein, "A Curriculum for Learning About Homosexuality and Gay Men and Lesbians in Psychiatric Residencies," unpublished, 1989). The curriculum was first presented at the 1990 meeting of the American Association of Directors of Psychiatric Residency Training (AADPRT).

Our finding that residents were less likely to have a gay-focused support group at their program and less likely to want one in its absence is consistent with an earlier study (2) of support systems for women in medicine, documenting decreased interest in group support as training progressed. Both studies may reflect residents' enhanced opportunity in the community to satisfy their affiliative needs.

Regarding the issue of disclosure, a distinction must be made between coming out to professional colleagues and to patients. Coming out to colleagues may be viewed not only as a barometer of a resident's strengthened identity as a gay man or lesbian (3) but also as an indicator of an institution's philosophical stance and level of support. More controversial is disclosure to patients: many psychotherapists proscribe any sort of self-disclosure. Some, however, argue that disclosure provides positive role modeling otherwise unavailable to homosexual patients (4–6) and that it can benefit the treatment of heterosexuals as well (7).

Our findings show that residents disclosed to gay and lesbian patients with increasing frequency as training progressed. This may be simply a function of greater exposure to gay and lesbian patients as overall patient load expands. Alternatively, increasing disclosure may be an indication that more experienced residents consider it psychotherapeutic for patients to know their therapist's sexual orientation. In some cases, self-disclosure may represent an inappropriate breach of therapeutic boundaries, perhaps in an effort to counter the isolation experienced by some lesbian and gay residents. Further study is needed to determine the effect on clinical outcome of the decision to reveal or conceal sexual orientation.

Although our results indicate that in some ways gay and lesbian residents encounter greater institutional support than they experienced as medical students, there are clear and disturbing differences among residents based on gender. For example, although psychiatric residents are more likely than medical students to have faculty with whom to discuss gay and lesbian issues, this increased openness was experienced primarily by men. Similarly, whereas more men characterized their program as affirming of their sexuality, more women felt stigmatized.

Past studies (8,9) of women in medical training have shown that, as a group, they experience more stress than men and often feel alienated from their male colleagues, especially their predominantly male attendings. The AAMC reports that as residency applicants, women are seven times more likely to experience an offensive incident during their interview and five times more likely to have their commitment to medicine questioned (10); they are more likely to be confronted regarding their interpersonal relationships, childbearing plans, and
spouse’s support of their career choice. It may be that this perceived differential treatment continues into residency, with an exacerbated effect in the case of lesbians, who experience double discrimination. In a personal memoir (11), a fourth-year psychiatry resident writes that lesbians in academic medicine must contend “with being both a visible (woman) and an invisible (lesbian) minority” (p. 99); she adds that they often feel unsupported and misunderstood.

Lesbians are clearly subject to all the stressors, and more, that affect women in medicine—stressors from which gay men appear somewhat shielded. One explanation for the greater support perceived by gay males may be that as men they have more opportunities to establish satisfying mentoring relationships than do lesbians, who may be less secure in the academic hierarchy, with few female and even fewer openly lesbian role models.

Clearly, our research has produced more questions than answers. We do know that homosexual men and women, medical students and residents alike, would prefer their training institutions to be more supportive of their sexuality and more adept at facilitating sensitive care of gay and lesbian patients. It is a troubling possibility that psychological morbidity among homosexual patients, students, and residents is not only ignored but exacerbated by institutions that fail to fully recognize these individuals’ unique needs. In our opinion, the resulting sense of alienation, experienced not only by gay men and lesbians, but also by heterosexual women and other minorities as well, curtails the active participation of many trainees and, in fact, limits recruitment of sizable numbers of well-qualified applicants. In this way, medical centers are deprived of diverse sources of creative energy.

References

Gender Differences in Faculty Retention and Rank Attainment in Academic Departments of Psychiatry

Ellen Leibenluft, M.D.
Mark G. Haviland, Ph.D.
Thomas H. Dial, Ph.D.
Carolyn B. Robinowitz, M.D.

Using 1989 data from the Faculty Roster System of the Association of American Medical Colleges, the authors examined gender differences in retention and rank attainment of psychiatry faculty who had received their first full-time medical school appointments in 1978. Retention differences between men and women were not significant in either the M.D. or the Ph.D. subgroup. Women M.D.'s in the sample had advanced through the academic ranks to a significantly lesser extent than had men M.D.'s; the rank attainment differences among Ph.D.'s, however, were not significant. These results underscore the need for more study of gender differences in the career paths of faculty in academic psychiatry departments.

Several studies have documented gender differences in academic rank attainment in departments of anesthesiology, internal medicine, and radiology (1–3). Nickerson et al. (4) found that women and men hired at Columbia University College of Physicians and Surgeons from 1969 through 1988 advanced on both the tenure and clinical tracks at similar rates, although women were overrepresented on the clinical track. It seems premature, however, to conclude that women medical school faculty do not encounter barriers to advancement or that they have broken through the "glass ceiling" (5).

Although psychiatry always has been one of the specialties preferred by women physicians (6–8), no studies on the status of women in academic psychiatry have been published. Thus, the purpose of the present investigation was to determine whether gender differences in retention and rank attainment exist in academic departments of psychiatry. Because roughly one-third of psychiatry faculty hold Ph.D.'s or other health doctorates (9), we also wanted to examine the effect of degree and the possible interaction between degree and gender on retention and rank attainment.

METHODS

For this study, we extracted data from the Association of American Medical Colleges.}

Dr. Leibenluft is medical officer, Clinical Psychobiology Branch, National Institute of Mental Health. Dr. Haviland is associate professor of psychiatry and director of research, Department of Psychiatry, Loma Linda University School of Medicine. Dr. Dial is assistant director for Employer Benefits Research, Policy Development, and Research Department, Health Insurance Association of America. Dr. Robinowitz is senior deputy medical director, American Psychiatric Association.

Copyright © 1993 Academic Psychiatry.
(AAMC) Faculty Roster System, a computer database containing current and historical information on the employment, training, credentials, and demographic characteristics of approximately all full-time, salaried faculty at U.S. medical schools, from 1966 to the present. At any point in time, the database contains information on approximately 80% to 90% of all active, full-time, salaried faculty at medical schools in the United States (10).

From the Faculty Roster, we took 1989 data that pertained to current and former (inactive) psychiatry faculty who received their first medical school faculty appointment in 1978 ($N = 436$). To minimize the number of uncontrolled extraneous variables, we limited the analysis to faculty holding M.D. degrees (or the equivalent) or other doctorates (to whom we refer to simply as “Ph.D.’s” because that degree is held by more than 90% of them). This smaller group was the cohort studied ($N = 386$; 30 M.D. women, 208 M.D. men, 50 Ph.D. women, 98 Ph.D. men).

From the database, we selected the following variables: 1) gender, 2) academic rank, 3) type of doctorate, 4) year appointed to first medical school faculty position, and 5) status (active or inactive).

RESULTS

The first question we considered was whether, at the time of follow-up 11 years later, the women in the 1978 cohort were more likely than men to have dropped out of academic medicine. By the end of 1989, 20 (66.7%) of the 30 M.D. women and 107 (51.4%) of the 208 M.D. men no longer held their academic appointments ($\chi^2 = 2.44; df = 1; P = 0.12$). Among the Ph.D.’s, 28 (56.0%) of the 50 women and 52 (53.1%) of the 98 men had left academic psychiatry by the end of 1989 ($\chi^2 = 0.12; df = 1; P = 0.73$). (The M.D. women/Ph.D. women by inactive/active $\chi^2$ test was not statistically significant: $\chi^2 = 0.89; df = 1; P = 0.35$.)

Table 1 shows the distributions of academic rank, by gender and degree type, of the 1978 entry cohort who still were active in 1989 ($N = 179$; 10 M.D. women, 101 M.D. men, 22 Ph.D. women, 46 Ph.D. men). Among M.D.’s, only 30% of the women had advanced at least to the associate professor level after 11 years, while more than 60% of their male counterparts had. Moreover, none of the M.D. women had achieved the rank of full professor. To test for differences in rank attainment between the men and women within each degree type, and between degree types for men and women separately, we used Kruskal-Wallis nonparametric analysis of variance. The $H$ statistics are evaluated as chi-squares with 1 degree of freedom. The rank attainment difference between women and men M.D.’s was statistically significant at the 0.05 level ($H = 4.06, P = 0.04$). The rank attainment differences between women and men Ph.D.’s were not significant ($H = 0.01, P = 0.91$), and neither were the “same sex” differences: M.D. vs. Ph.D. women ($H = 1.03, P = 0.31$) and M.D. vs. Ph.D. men ($H = 2.33, P = 0.13$).

<table>
<thead>
<tr>
<th>Academic Rank</th>
<th>Women</th>
<th>%</th>
<th>Men</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>17.8</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>3</td>
<td>30.0</td>
<td>43</td>
<td>42.6</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>6</td>
<td>60.0</td>
<td>35</td>
<td>34.7</td>
</tr>
<tr>
<td>Instructor</td>
<td>1</td>
<td>10.0</td>
<td>5</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.0</td>
<td>101</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Rank</th>
<th>Women</th>
<th>%</th>
<th>Men</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>1</td>
<td>4.5</td>
<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>11</td>
<td>50.0</td>
<td>20</td>
<td>43.5</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>7</td>
<td>31.8</td>
<td>21</td>
<td>45.7</td>
</tr>
<tr>
<td>Instructor</td>
<td>3</td>
<td>13.6</td>
<td>2</td>
<td>4.3</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>100.0</td>
<td>46</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Due to rounding, column percentages do not always sum to 100.0.
DISCUSSION

Eleven years after joining academic departments of psychiatry, the women M.D.’s in our sample had advanced through the academic ranks to a significantly lesser extent than had the men M.D.’s. Studies of faculty in medical specialties other than psychiatry and in other scientific disciplines have revealed similar rank attainment differences between men and women (1–3, 11), and a number of plausible explanations have been suggested. Oftentimes cited is “motherhood.” In a survey of women physicians in a department of internal medicine, for example, women who had combined motherhood with academic careers believed that having children slowed their career progress [12]; yet, studies assessing the influence of family responsibilities on women scientists’ productivity generally do not find that women with children publish fewer papers than do those without children (13,14).

A second explanation is the lack of mentors and role models for women. Several studies demonstrate that women are less likely than men to have academic role models and mentors and that women with mentors publish more papers than do those without mentors (15,16). Gender differences in the availability of role models and mentors may reflect subtle forms of discrimination, or they may result from a dearth of senior women in academic departments. They may also reflect, to some extent, unwillingness on the part of men to be mentors to women or less aggressiveness on the part of junior women, as compared with junior men, in seeking working relationships with potential mentors. This topic needs more study.

In contrast to our finding for M.D.’s, there was no gender difference in rank attainment among Ph.D.’s in our sample. Because women made up a larger fraction of the Ph.D. cohort than the M.D. cohort in both 1978 and 1989, it is conceivable that the greater availability of women peers (and possibly role models) contributed to the academic success (i.e., advancement) of the women Ph.D.’s. Moreover, while both men and women Ph.D.’s, by and large, receive research training before their academic appointments, men M.D.’s are more likely than women M.D.’s to have research training and to engage in research activities (17).

We did not find a statistically significant gender difference in the retention of M.D.’s (or Ph.D.’s); nevertheless, our results do suggest a need for further study. In 1978, only 30 women M.D.’s nationwide were reported to the AAMC Faculty Roster System as having received full-time, medical school faculty appointments in departments of psychiatry. By 1989, only one-third of those women were still full-time, active faculty. In contrast, roughly one-half of the men M.D.’s in the 1978 cohort were on “full-time, active” status in 1989. Because of the small number of women in the M.D. sample, interpreting this difference in attrition rates is problematic. Furthermore, we do not know what proportion of the women left full-time academic positions to become part-time faculty. In future studies, it would be useful to track part-time as well as full-time faculty and to analyze data from a number of entry cohorts.

Our retention results, like the rank attainment results, suggest that gender differences may be more pronounced among M.D.’s than they are among Ph.D.’s. It is possible that part-time practice opportunities are more widely available for M.D.’s than they are for Ph.D.’s and are attractive alternatives to academic careers for women in their childbearing years. In any case, these findings underscore the importance of studying M.D.’s and Ph.D.’s separately (see also Schaller [5]).

In sum, we found statistically significant gender differences in rank attainment among M.D.’s, but not among Ph.D.’s, in a cohort of full-time psychiatry faculty 11 years after their entry into the AAMC Faculty Roster System. Clearly, more study is needed to learn whether such differences
exist in other cohorts and, if they do, to explore their causes.

This article was presented in part at the 144th Annual Meeting of the American Psychiatric Association, New Orleans, LA, May 1991.

References

5. Schaller JG: The advancement of women in academic medicine. JAMA 1990; 264:1854-1855
Correlates of Psychiatry
Grand Rounds Attendance

Mark E. Kunik, M.D.
Shirley G. Merritt, M.D.
Lynnda M. Dahlquist, Ph.D.
David Marks, B.A.

Although grand rounds is an important educational conference in most medical schools and psychiatry departments, there have been few studies of which variables influence faculty and trainee attendance. The authors hypothesized that psychiatry grand rounds attendance would be affected by content area, the speaker’s discipline and geographic origin, and the label of “research” in the presentation title. In 3 years of grand rounds presentations at the Baylor College of Medicine Department of Psychiatry and Behavioral Sciences, fewer residents attended grand rounds when “research” was in the label and attendance was greater when the rounds were cosponsored by another agency, presented in honor of someone, or given by an out-of-town speaker.

Although grand rounds is a widely used forum for educating health science professionals of all levels and disciplines, there has been little empirical study of the effectiveness of grand rounds as an educational tool. In particular, we were unable to find any studies of grand rounds in departments of psychiatry. The few available studies of grand rounds in other departments suggest that attendance is, at best, sporadic. For example, in a study of a department of medicine in New Zealand, Richmond (1) found that 50% of each week’s audience was absent at the previous week’s grand rounds. Similarly, at the Luton and Dunstable Hospital Medical Centre in England, Siegler (2) found that 30% of general practitioners from the area never attended a single meeting.

Investigators interested in maximizing the use of the educational opportunity offered by grand rounds have attempted to identify factors that affect attendance. The resulting literature ranges from scientific surveys to philosophical arguments, with widely varying recommendations. For example, 78% of the absentees in Siegler’s study (2) returned a questionnaire stating why they did not attend rounds. Their reasons mainly involved scheduling conflicts and competing clinical demands; only one respondent said that the meetings were not relevant to his general practice. Similar results were obtained by Reedy et al. (3) in a survey of general practitioners in Newcastle, England. They found that more continuing education rounds were attended by physicians who had backup clinical coverage, that

---

Dr. Kunik is assistant professor, Dr. Merritt is clinical assistant professor, and Dr. Dahlquist is assistant professor, Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, Texas. Mr. Marks is research assistant, Department of Psychology, University of Houston. Address reprint requests to Dr. Dahlquist, Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.

Copyright © 1993 Academic Psychiatry.
is, those in larger group practices and those who had hospital appointments.

There is some speculation in the literature that the content of grand rounds presentations may affect participation. For example, Bogdonoff (4) expressed concern that in his survey of the chief medical residents of 122 internal medicine departments, all 101 respondents reported that the major emphases of rounds were basic sciences and reviews of fundamental pathophysiologic processes, with no attention to psychosocial issues. In the Reedy et al. (3) study described above, the general practitioners reported that they were most interested in clinical presentations, therapeutics, "recent advances," and reviews of common diseases. Local consultants were preferred as speakers over "celebrities," and physicians were perceived to be much more important contributors than nurses, social workers, nonmedical academics, and drug firm representatives. In a study of 48 medicine department chairmen at Canadian teaching hospitals, McLeod and Gold (5) found 98% of the chairmen felt that the quality of medical grand rounds had improved or stayed the same in the past decade. In addition, 75% of respondents reported that attendance had improved, and only 10% were still concerned about the diminished emphasis on patient-related topics in grand rounds. In contrast, Pickup et al. (6), in a study of general practitioners in Nottinghamshire, England, concluded that content and teaching methods were not the cause of low attendance.

The structure of grand rounds also may be important. Rosen (7) reported being able to increase grand rounds attendance at the Clinical Center of the National Institutes of Health by having two speakers presenting different topics; starting and ending on time; having a fixed meeting place and time; and having a more intimate setting. In contrast, Ingelfinger (8) argued that the primary problem with grand rounds is that they are no longer accorded the respect and formality that they received in the past. He recommended rigorous punctuality, elimination of beeper noise, and a return to hierarchical seating assignments with greater participation from service chiefs seated at the front of the audience.

Finally, incentives have been shown to have an effect on attendance (9,10). In a study of medical grand rounds conducted by Massengil et al. (9) at the Bristol Regional Medical Center, in Tennessee, 80% of respondents indicated by self report that they had been more inclined to attend grand rounds since being offered prescribed credit by the American Association of Family Physicians.

The goal of grand rounds at the Department of Psychiatry, Baylor College of Medicine, is to provide a weekly forum for experts from all psychiatric subspecialties and disciplines to teach medical students, residents, faculty, and community mental health professionals. The purpose of this study was to describe the distribution of grand rounds content areas and to identify factors that affect psychiatry grand rounds attendance. On the basis of the limited available literature concerning grand rounds in other medical departments, we proposed that the following variables might be related to attendance: professional discipline of the speaker, geographic origin of the speaker, and clinical relevance of the topic. We hypothesized that 1) speakers from the different disciplines would differentially attract more attenders from their own discipline (i.e., M.D.'s would attract more M.D. attenders; Ph.D. speakers would attract more Ph.D. attenders, etc.); 2) that out-of-town speakers would draw larger crowds because of the appeal of the speaker's national reputation; and 3) that grand rounds identified as research-related would be perceived as less clinically relevant and therefore would be more poorly attended than those related to clinical practice.

We also were interested in studying the relationship between attendance and the specific psychiatric topics presented. For example, we expected that M.D.'s would be
more interested in biological topics such as psychopharmacology and electroconvulsive therapy and that other mental health trainees and faculty would attend rounds on biological topics less frequently.

Finally, we hypothesized that there would be a difference in attendance if the grand rounds was publicized as dedicated to a retiring professor, as jointly sponsored by a neighboring medical school, or as cosponsored by a social service agency, in comparison with rounds without such designations. These special designations were expected to appeal to a wider, less specialized audience.

**METHODS**

Baylor College of Medicine (BCM) is located in Houston, Texas. The Department of Psychiatry and Behavioral Sciences has 70 full-time faculty (38 on campus and 32 off campus at the Veterans Affairs Hospital approximately a half-mile away), and 17 part-time faculty. The adult residency program admits 10 to 12 residents per year, and total number of residents ranges from 42 to 48.

The department's grand rounds program consists of a speaker, either someone from within the department or a guest, who presents a topic from a didactic viewpoint or as illustrated by a clinical case presentation. There is a short follow-up by a discussant and a time for general audience questions. Grand rounds are presented every Wednesday from 10:30 to 11:45 A.M., from September through June. The grand rounds monthly schedule is distributed to the full- and part-time faculty and residents a week before the first grand rounds of each month and contains the title of the presentation and the name and academic affiliation of the presenter. Faculty and residents are verbally encouraged by the department chairman to attend, but there are no specific consequences for nonparticipation.

The Department of Psychiatry and Behavioral Sciences grand rounds were reviewed for the three academic years 1987–1990. Faculty, nonfaculty, and trainee attendance at a total of 93 grand rounds was analyzed. One grand rounds per year (3 total) was cosponsored by a social service agency (Jewish Family Services), 1–2 grand rounds per year (5 in the 3-year period) were held jointly with the University of Texas Health Science Center Department of Psychiatry, and 1 grand rounds a year (3 total) was dedicated to a retiring professor (“dedicated” grand rounds). We classified these 11 rounds as “specially sponsored” grand rounds.

For each of the remaining grand rounds presentations, the speakers were categorized by discipline and by geographic origin (i.e., “Baylor College of Medicine,” “Houston area but non-Baylor,” and “out of town”). We also categorized the title of each grand rounds by three classification systems. The first was whether the title seemed predominantly biologic or nonbiologic. Biologic categories included pharmacologic treatment, receptors, and neurotransmitters; nonbiologic categories included psychodynamic psychiatry, nonpharmacologic treatments, and ethics. We also classified each title within a major subject heading of psychiatry (i.e., psychopathology, somatic treatments, child psychiatry, etc.) derived from the Psychiatry Resident In-Training Examination (PRITE) scoring categories. If there was a discrepancy between the raters’ categorizations in either classification system, it was discussed and a consensus was reached. Finally, 12 grand rounds (4 per year) were arranged by the department’s research committee and involved the presentation of ongoing research. One year these rounds were specifically labeled “Research Grand Rounds” on the monthly schedule; the other two years there was no such label. We compared attendance at the 12 research grand rounds with attendance at all other grand rounds; research rounds that were labeled as such with research rounds that were unlabeled; and research-labeled rounds with routine rounds.
In summary, the dependent variable was attendance, and the independent variables were 1) special sponsor, 2) speaker's discipline, 3) speaker's geographic origin, 4) biologic versus nonbiologic content, 5) psychiatric content area, and 6) research content.

RESULTS

Descriptive Data

The proportion of grand rounds in each topic area is presented in Table 1. General adult clinical topic areas were most common, with psychotherapy, psychopathology, and case conferences composing 43.7% of the total grand rounds. Only 21% of the rounds were classified as biologic in content; 79% were classified nonbiologic.

Fifty percent of the speakers were from Baylor, 8% were from Houston but not from Baylor, and the remaining 42% were out-of-town speakers. The distribution of speakers by degree was as follows: 74 M.D.'s (80%), 11 Ph.D.'s (12%), 3 M.S.W.'s (1%), and 5 others (5%).

The average total attendance per grand rounds presentation over the 3 years studied was 84 ± 22 (SD) with a range of 39 to 134. The average numbers of residents, M.D. faculty (full- and part-time), and non-M.D. faculty (full- and part-time) attending were 19.42 ± 6.19, 28.16 ± 7.7, and 8.69 ± 4.3, respectively. On average, 47% of the residents attended grand rounds; this included 55% of PGY-1's, 48% of PGY-2's, and 50% of PGY-3's, but only 37% of PGY-4 residents.

One-way analyses of variance (ANOVAs) were conducted on each of the 12 dependent variables (overall attendance, M.D. faculty attendance, Ph.D. faculty attendance, total resident attendance, resident attendance per postgraduate year [PGY 1–4], social work intern attendance, clinical psychology intern attendance, medical student attendance, and other attendance) for each of the independent variables. A conservative alpha level of 0.01 was employed for initial analyses to control for Type I error due to the large number of data analyses conducted.

Sponsor: The data revealed that specially sponsored rounds attracted more people overall, and, in particular, more M.D. and Ph.D. faculty and attendees from outside the medical school, than did regular Baylor grand rounds. Post hoc comparisons presented in Table 2 indicated that rounds dedicated to a retiring professor and rounds cosponsored by a social service agency had higher total attendance than the routine Baylor rounds ($F = 4.06, df = 3,87, P < 0.01)$. M.D. faculty attendance at rounds dedicated to a retiring professor was significantly better than attendance at the other three categories of rounds ($F = 4.06, df = 3,87, P < 0.01$). There also was a trend for more non-M.D. faculty to attend the rounds cosponsored by a social service agency than the Baylor rounds ($F = 2.67, df = 3,87, P < 0.05$). Significantly more individuals from outside the medical school attended the social service agency cosponsored rounds than attended...
all other categories of rounds ($F = 14.1, \text{df} = 4.87, P < 0.001$). A significant effect for sponsor on trainee attendance was not found.

Specially sponsored grand rounds were excluded from the following data analyses because the attendance at the few rounds sponsored by outside agencies was so much greater than the attendance at routine Baylor rounds.

Speaker Characteristics: One-way analysis of variance indicated there was significantly higher overall attendance for out-of-town vs. Baylor speakers ($F = 7.23, \text{df} = 2.80, P < 0.001$). A similar trend was true for attendance of individuals from outside the department ($F = 3.98, \text{df} = 2.80, P < 0.05$) and for M.D. faculty attendance ($F = 2.8, \text{df} = 2.80, P < 0.001$). Speaker discipline was not significant for any of the remaining attendance measures.

Content Area: Residents overall, and PGY-3 and -4 residents in particular, attended rounds that were labeled as research related significantly less often than routine Baylor rounds ($F = 4.83$ and $4.2$, respectively; $P < 0.01$). There were no significant differences in any categories of attendance for biological vs. nonbiological topics or for specific psychiatric content areas.

Regression Analyses: The three variables found to be related to total attendance and to resident attendance—geographic origin of the speaker, research labeling, and sponsor—were entered into a stepwise multiple regression. Regression analyses indicated that these three variables accounted for approximately 27% of the variance in total grand rounds attendance and approximately 24% of the variance in resident grand rounds attendance.

**DISCUSSION**

Grand rounds occur in most departments of psychiatry. However, no one, to our knowledge, has systematically evaluated the content areas covered in these grand rounds or looked at correlates of attendance. This study suggests ways to improve grand rounds topic selection and attendance.

We did not find differences in attendance for different psychiatric content areas; however, breaking down the grand rounds schedule into topic areas was useful in evaluating our goal of providing a full spectrum of psychiatric content areas. For example, we discovered that several areas were relatively underrepresented in our schedule (i.e., substance abuse, emergency psychiatry, and ethics). This oversight has already been addressed in the subsequent year’s grand rounds schedule. Thus, the simple act of categorizing grand rounds by topic may be useful in directing future changes in continuing education curricula.

Grand rounds that were jointly sponsored by BCM and a social service agency and grand rounds dedicated to retiring professors drew significantly larger attendance than all other rounds. These rounds attracted more people both from within and

<table>
<thead>
<tr>
<th>TABLE 2. Mean attendance by grand rounds sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>UT Medical School Cosponsor</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>M.D. faculty</td>
</tr>
<tr>
<td>Ph.D. faculty</td>
</tr>
<tr>
<td>Outside department</td>
</tr>
</tbody>
</table>

*Note: Means identified by different superscripts differed significantly at post hoc comparisons ($P < 0.05$).*
outside of Baylor, regardless of the topic or the presenter. This finding may simply reflect the fact that there was more publicity for these rounds. However, the specific pattern of attendance suggests that there may also be something about designating rounds in honor of a retiring faculty member that is very effective in specifically attracting more faculty attenders. On the other hand, jointly sponsoring grand rounds with a community agency may be the preferred strategy for attracting professionals from the community. Bringing in nationally prominent speakers from out of town also appears to have considerable promise. As predicted, out-of-town speakers drew more attenders from the community as well as from within the department. Thus, the extra cost of bringing in leaders in their fields appears justified.

Analyses of attendance by grand rounds content areas revealed some expected and some surprising patterns of relationship. For instance, the relatively poor overall attendance at rounds that were clearly identified as research related was expected. Fewer clinicians from the community were expected to be interested in research topics. However, the relatively poor attendance of residents at research-labeled rounds was surprising and potentially worrisome. It appears that a bias against research can emerge early in the course of psychiatric training. Given the current problems nationwide in attracting residents into research and academic psychiatry, these biases need to be addressed. It is unlikely that residents will become excited by research opportunities in psychiatry without the stimulation offered by exposure to actual researchers and current research ideas. The present findings suggest that it may be advisable to avoid the label of research in the publicized titles of grand rounds presentations. This would prevent residents from routinely skipping rounds that have a research basis, and it may provide greater resident exposure to empirical issues.

We also expected M.D.’s to be more likely than other mental health professionals to attend rounds involving biologic topics because of their particular training in the medical model. However, this hypothesis was not supported. These results may indicate that many nonpsychiatrists, particularly Ph.D. researchers, may be very interested in biological aspects of psychiatry. The relatively small number of biologic grand rounds also may have made it more difficult to detect any significant differences.

Geographic origin of the speaker, research labeling, and sponsoring of grand rounds accounted for 27% of the variance. However, the size of the remaining variance is substantial. We speculate that competing clinical responsibilities are a major factor in determining whether faculty and residents attend grand rounds.

This study demonstrated unanticipated benefits from systematically evaluating grand rounds. Based on the findings, the department currently is evaluating innovative approaches to increasing grand rounds attendance, which include 1) joint sponsorship of grand rounds or special invitation to other departments or social agencies whenever topics of overlapping interests are scheduled; 2) avoidance of the word research in the label of grand rounds; and 3) assurance that each year several nationally prominent speakers will be invited to lecture at grand rounds. Further study is needed to determine whether these strategies actually increase attendance at grand rounds.

References
3. Reedy BLEC, Gregson BA, Williams M: General
practitioners and post-graduate education in the Northern Region. J R Coll Gen Prac [Occas Pap] (suppl 9) 1979:1-5
Development of Junior Faculty in Resource-Poor Departments of Psychiatry

Yogesh Bakhai, M.D.
Uriel Halbreich, M.D.

Junior faculty are required to develop steady, productive academic and research programs in order to stay on an academic track and be promoted. In departments that are not research centers, quite often new, aspiring faculty do not have the time, skills, training, and the encouraging environment necessary to meet these demands. Quantitatively, research-poor departments provide clinical services to the majority of patients in the United States and psychiatric training to a large number of medical students and residents. It is quite widely accepted that enhancement of academic education in these departments is needed. Currently, however, most suggestions to increase research in such departments have been initiated from the research center's perspective. In this study, the problem is illuminated from the faculty's perspective in resource-poor departments. Solutions are discussed and new approaches are suggested.

Junior faculty are required to develop steady, productive academic careers in order to stay on an academic track and be promoted. The main criterion for success is innovative, funded, and published research. However, junior faculty are often the most overburdened group in the department. Quite often, they do not have the time, skills, training, or a supportive environment to develop their academic careers. "Publish or perish" may be a cliché, but it is clear that publishing in peer-reviewed journals is essential for success in academic medicine (1). In the article, "What is Wrong With Academic Medicine" (2), Petersdorf points out that the days of the "triple threat academician"—one who could handle a clinical practice and its inevitable teaching responsibilities, conduct valid research and still have time left over to serve on committees—might be over. Junior faculty in resource-poor departments have the most difficulty with such activities, as constricting budgets and increased competition for resources create pressures on academicians to bring in more funds through service to patients (3).

It is generally agreed (4) that an insufficient number of physicians choose an academic career, and the number of investigators is actually decreasing. The loss of academic faculty might be more acute in psychiatry (5). The two issues of career development of junior faculty and shortage of academic psychiatrists are intrinsically linked. As Pardes et al. (6) noted, "if we are to flourish as a discipline, we must have the capacity to add new insights and data to the knowledge base of our own accord, not just..."
through riding the coattails of other disciplines." However, broadening the knowledge base should be accompanied by increasing the number of those who generate and distribute the knowledge—"academicians." The geographic distribution of well-trained academicians must be expanded in order to reach more future physicians and improve treatment globally in the future.

Most current suggestions to remedy these problems are geared toward the creation of "Centers of Excellence" (CEs) at a few well-known, well-established universities. Despite these centers, the majority of medical students, clinicians, and patients are associated with resource-poor departments. Hence, any attempt at elevating the average quality of academic psychiatry must also address resource-poor departments.

The following is a review of the literature on faculty development of junior psychiatrists. Solutions are proposed from the perspective of resource-poor but clinically rich departments. New approaches for enhancement of training and research in these departments are also suggested.

MAGNITUDE OF THE PROBLEM

It might be suggested that capable and motivated young psychiatrists will find opportunities for research and take advantage of them without any organized effort to help the process (7). Although this may be true for a small number of psychiatrists, it is not the case for most academic psychiatrists. A report by the National Academy of Sciences (8) on the needs of biomedical and biobehavioral research personnel revealed that compared with other departments, fewer members of departments of psychiatry have had any research training or experience (12% vs. 34%), participated in any research (50% vs. 60%), or were principal investigators on a federally funded research grant (5% vs. 13%).

In 1985, only 20% of all principal investigators funded by the National Institute of Mental Health (NIMH) were physicians, and only 14% of NIMH research trainees were psychiatrists (8). Furthermore, at least one-half of all departments with approved psychiatric residency training programs in the United States had no NIMH-funded projects, and 77% of all NIMH-awarded grants were won by only 10% of these departments.

REASONS FOR THE SHORTAGE OF PSYCHIATRIST-RESEARCHERS

The critical shortage of physicians who choose careers in clinical and/or basic science research in psychiatry has been a concern and the subject of debate, conjecture, and investigation for the past 15 years. It has been suggested that medicine in general and psychiatry in particular loses a substantial number of talented researchers even prior to medical school (9). Students perceive medicine as primarily patient-care oriented. Therefore, a research-oriented candidate might choose a Ph.D. track rather than attend a medical school.

As a member of a resource-poor department of psychiatry, the aspiring clinician-academician faces some real-life issues, such as a substantial clinical load, lack of discretionary professional time (10), lack of support staff, lack of research infrastructure, lack of research environment, inflexibility in the department, and lack of enthusiasm and support from colleagues. These issues are generally ignored in most publications on the subject, but they are quite prevalent. Most senior faculty in resource-poor departments lack appropriate research training themselves. Thus, they are less aware of its value and are less likely to encourage junior faculty to pursue research (11).

Increased subspecialization, oftentimes a necessity for excellence in scholarly work, is not always encouraged in departments with a heavy clinical load. Such departments would actually prefer general psychiatrist-clinicians. Because clinical activities gener-
ate immediate funds for departments and individual faculty, devoting time to research and other creative scholarly activities may result in a loss of departmental or institutional income.

CURRENT SOLUTIONS FOR RESEARCH AND ACADEMIC DEVELOPMENT

Although most of the solutions described here concern either a growing or a changing specialty, such as emergency medicine or family medicine, it is apparent that these problems of academic development are shared by other specialties, including psychiatry. Simplistic solutions—like a statement (12) that “if sufficient time for academic pursuits is provided, then there is no reason for any faculty member to be academically non-productive”—are inadequate.

One of the primary and traditional methods for achieving scholarship and successful faculty development is individual mentorship. Mentorship should be more than guidance. It should include providing intellectual leverage, fostering growth and independence, and promoting membership within a larger, homogeneous aggregate of individual scientists, journal editors, members of professional societies, and administrators of funding agencies (13,14). The mentorship method of faculty development is limited because the demands of a one-to-one relationship are great, and the number of good mentors is small.

There is general agreement that the best way to spark residents’ interest in research is to provide a successful experience with an academic mentor (15,16). An appointment of a faculty member within the department of psychiatry as a resident research facilitator is recommended (17). This individual can assist the resident researcher in the development of the individual’s project, from problem formulation to publication. The facilitator should be familiar with department resources and the research interests of all faculty, as well as of all residents.

During residency training, support and encouragement for research can take many different forms, the most important being the provision of free time not hampered by clinical responsibilities, or elective time. Equally important are other examples of support, including funding for resident research, research awards, forums to present resident research results and hiring of residents as “moonlighters” on research projects. Residents’ interest in research can also be encouraged through regular journal clubs and seminars for research and by assigning residents to be active in projects as research project facilitators (17–22). Several authors (9,23,24) have suggested increasing the length of residency training to 6 years for certain individuals and intertwining clinical training and research during that period. A combined M.D./Ph.D. program in collaboration with the department of psychology or other departments has also been suggested (9).

Similar problems are tackled by junior faculty, especially in resource-poor departments. In addition, they have to comply with the tenure system in universities, even though it is continuously exposed to scrutiny and criticism (25,26). Junior faculty whose main responsibility is clinical care feel that they should be rewarded and promoted equally with those who devote themselves to research (27). Many medical schools are adopting a “clinical track,” and faculty members are pressured to sustain themselves by devoting increased time to patient care and teaching. In this track system, clinical work and teaching are weighted heavily in the academic review process (28). It can be argued that the creation of a “clinical track” is counterproductive for the development of scientists because it dilutes the incentives and rewards associated with achievement of promotion “the hard way.”

Coauthorship in a collaborative study should be considered almost as highly as being a principal investigator. In the same
manner, originality and quality of scientific publications should be paramount, not just the quantity of papers, as a large volume of publications may reflect industry rather than originality (28).

The allocation of time expressly for research is an important issue, and for junior faculty who are also developing academic careers, time devoted to research should be substantial (29). Department chairs can increase the time allocation to research for selected promising and productive researchers. Such time allocation could cause problems in smaller departments, as this might limit productivity to a few members of the faculty. Alternatively, “mini-sabbaticals” have been proposed in the specialty of family medicine in order to provide faculty with periods for more intensive research and study (30).

Research can be further facilitated by opening a Clinical Investigation Unit (CIU) (31). CIUs are special facilities with higher staff-to-patient ratios and as such are a costly endeavor (10). CIUs and CEs have been established in several major institutions. However, they are limited in number and do not address the issues of resource-poor departments. In many basic science departments, an effort has been made to provide links between stronger and weaker investigators’ teams to overcome the isolation of schools not in CEs (32). Such an effort might also be productive in clinical departments. Otherwise, future movement in the direction of CEs would weaken other universities and lead to falling standards of teaching, training, and research in developing departments (33).

Academic research in developing departments might be furthered by encouraging faculty members to participate in research, even if their role is limited to recruitment and clinical follow-up (34). Such participation in applied field research might also be suitable and rewarding for practitioners who rarely find it feasible to carry out large trials in community settings (35) and frequently question the applicability of results from university-based experiments.

Another approach is the utilization of federal government or private foundations’ initiatives. For example, from 1978 to 1986 the Department of Health and Human Services and the Robert Wood Johnson Foundation awarded $32.4 million to family medicine faculty development programs to increase the number of full-time family physician faculty and improve the teaching skills of new and current faculty. Because family medicine was a relatively new specialty, the fellowships were geared to prepare faculty to advance the scholarly foundation of family medicine (36). As a result of this program, the percentage of graduates who were advanced to faculty positions exceeded that of other fellowships (74% vs. 57%). The attrition rate for these trained faculty was less than that of faculty in other areas of higher education. However, despite the support for this program, an average graduate spent less time (18%) in research than is recommended in order to be a productive investigator (37).

Despite the many approaches to junior faculty development, a clear and productive policy for faculty development is still lacking, not just in many departments of academic institutions but in health agencies as well. Additionally, there are no prospective studies that evaluate the success of the different approaches to faculty development. Although ways to promote research and faculty development are often discussed, efforts to solve problems of everyday academic life in small, developing, or resource-poor departments are few.

**RESEARCH AND FACULTY DEVELOPMENT IN RESOURCE-POOR DEPARTMENTS**

Efforts to enhance faculty development in resource-poor departments should be pursued on various levels: departmental, institutional, and national. In each case, funding
should be creative and matching programs of federal assistance for departments and medical schools should be actively pursued.

We believe that the main obstacles to the development of the aspiring academician in a resource-poor department include lack of stimulating and supportive environment, insufficient resources and infrastructure, overload of routine clinical work, and negative financial incentives.

The lack of academic infrastructure in many departments might be overcome by the creation of “Service Centers.” These centers can be regional (on a geographic basis) or university-based (across various disciplines). It is anticipated that such federally funded facilities and centers would provide laboratory technicians, equipment, and supplies for routine determinations such as assessment of levels of hormones, drugs, or amines. The centers would also provide biostatistical consultation, data entry, and analysis, as well as consultations on research design. Such centers could potentially save money because instead of allocation of grant funds to meritorious projects that are in a need of the above nonspecific functions, these projects might utilize the centers’ services. A regional center might also be an avenue for coordinating and distributing funds from other contributors (e.g., foundations) to the affiliated institutions and for clinically oriented research endeavors, such as treatment outcome studies and evaluations of new medications. These centers can also be developed to be the regional bases for continuous workshops for assistant professors, particularly on research but also on teaching and other academic affairs.

Although the proposed regional service center might fill the vacuum created by a lack of departmental infrastructure in resource-poor departments, it alone will not solve all major problems. For instance, a personal mentor should be assigned to each assistant professor from career start. But when such a mentor is unavailable in a department, a mentorship arrangement could be interdepartmental or interinstitutional. The specific training and academic experiences for the new faculty should be spelled out from the onset and on a contractual basis. Career tracks should be outlined, with checkpoints at least once a year and mutual evaluation of progress and obstacles. The career track should be enhanced by mini-sabbaticals of a few months’ duration. These sabbaticals should be contractual and begin following the second year of the assistant professor’s career. Ideally, they should be jointly developed with the mentor to facilitate specific training and experience that can be continued at the faculty’s home institution.

The initial funding of regional service centers and outside mentors is a worthwhile investment by the NIMH. These funds, however, should be matched by the universities and departments in the region “serviced.” These university-federal partnerships can serve as a basis for mutually beneficial university-pharmaceutical industry partnerships.

Another issue is that many young faculty are unable or unwilling to completely sacrifice the time they devote to their family or leisure activities for the pursuit of their academic careers, and they may also be unwilling to compromise their clinical income. Therefore, realistic financial incentives for entering and pursuing academic careers should be provided. These incentives could include payment for clinical services provided to research patients, a schedule of reimbursements for teaching activities, and increasing the competitive edge of academicians with their private practitioner counterparts. This can be done by formulation of a structured, faculty practice plan promoted by the university, which would emphasize the potential for better quality of care associated with university-based practices and would provide consultations to the area clinicians. An attempt at closing the financial gap between private practitioners and academicians is a long-term investment in quality teaching and service.
CONCLUSION

Career development of junior faculty is an important dilemma facing all departments but is an even greater problem in resource-poor departments. Several approaches have been tried to remedy this problem, but additional work in this critical area is needed. Here, several suggestions for faculty development are offered: 1) creation of regional centers; 2) personal mentoring with predetermined checkpoints of progress; 3) minisabbatical; 4) financial incentives; 5) promotion of higher quality of care provided by academicians; and 6) rewards for clinical teaching and participation in clinical trials by faculty on a clinical track for promotions.

References

5. Haviland MG, Pincus HA, Dial TH: Career, research involvement and research fellowship plans of potential psychiatrists. Arch Gen Psychiatry 1987; 44:493-496
8. Institute of Medicine, National Academy of Sciences: Personnel Needs and Training for Biomedical and Behavioral Research (Publ No 10N-83-03). Washington, DC, National Academy Press, 1983
35. Fontes H: Stratifying research curricula—the logical next step. Nursing Health Care 1986; 7:258-262
Medical Students’ Attitudes Toward a State Hospital

Anthony L. Pelonero, M.D.
William T. Ferriss, L.C.S.W.

To expose medical students to public psychiatry and destigmatize their attitudes about state hospitals, third-year medical students in a psychiatric clerkship were assigned to a 1-day visit at a nearby state mental hospital. Over a 2-year period (1988–1990), the medical students’ attitudes toward state hospitals were measured before and after the visit. Of the 188 survey pairs (measurements of the students’ pre- and post-visit attitudes) that were distributed, 173 pairs were collected. The students reported more favorable views after the visit on four of seven items. Because attitudes about psychiatry continue to develop during clerkships, medical students should be afforded broad exposure to career options in psychiatry, including site visits to state mental hospitals.

Effective educational programs on psychiatry in medical school are felt to be important in promoting the selection of a career in psychiatry (1). In a large survey of senior-year medical students, it was determined that most students decide on a specialty during or after clerkships (2). Although some authors have noted that the psychiatric clerkship may serve to “rekindle a latent interest in the mental health field,” the students’ clerkship has been called “the most important experience affecting their career decision for psychiatry in medical school” (3).

In 1983, Thompson et al. (4) noted that there had been a decline in the use of state mental hospitals as training sites for psychiatric residents from 1975–1980. In the same year, however, Faulkner et al. (5) published the results of a survey of commissioners of mental health departments and chairs of academic psychiatry departments, which noted that they felt that their institutional relationships were valuable and important for a number of reasons, including trainee education.

A number of studies have examined factors associated with choosing psychiatry as a career. Yet, the authors are aware of none that have focused on the attitudes of students toward state mental hospitals. Our state hospital-university collaboration was developed in part to provide more exposure for psychiatric students and residents to persistent and severe mental illnesses. Resident exposure to a state mental hospital also demonstrated another career alternative. In an attempt to desensitize any preconceived negative notions about state mental hospi-
tals, over a 2-year period all medical students at the Medical College of Virginia (MCV) were assigned to a 1-day visit. The purposes of the research were to determine the effect such an exposure had on the students' attitudes and to evaluate the usefulness of this educational program.

METHODS

Third-year medical students at MCV have a 6-week clerkship in psychiatry. Most of the students are assigned to the university hospital, some to a VA hospital, and a few to a private, general hospital's psychiatric ward. Three weeks into their rotations, the students were excused from their assigned clerkship sites to spend a day at a nearby state mental hospital, Central State Hospital in Petersburg, Virginia.

The day at the hospital consisted of a bus tour of the grounds (the campus covers over 600 acres), a slide presentation on general hospital information (such as bed capacity, average census, average length of stay, counties served, and so forth), and general data about the Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services. The students then visited some of the activity buildings (e.g., the vocational rehabilitation program). Lunch was often held in the supervised program staffed by the hospital's adolescent clients. After lunch, the students visited patient units and had case conferences. They also met with hospital staff and patients for about 2.5 hours.

The program ended with a question-and-answer period held with the authors, where the students were also asked to briefly describe the patients they saw to others who had not been in their group. Invariably, the students reported their time on the units seeing patients as the most interesting and rewarding. The usual day visit to the state hospital lasted 6 or 7 hours.

The hospital visits occurred over a 24-month period (from January 1988 to January 1990). The students' attitudes were measured within 1 week before and 1 week after the site visit. The survey instrument measured attitudes on a 5-point Likert scale (1 = worst, 5 = best) and used social security numbers to identify the student so that pre- and post-visit surveys could be compared. The survey included seven questions related to psychiatry and state hospital practice. The questions and verbal anchors are listed in Table 1.

RESULTS

A total of 286 students were in clerkships during the 2-year period, of which 261 visited the state hospital; 25 students could not visit the hospital for personal reasons (illness, etc.). Of the 188 students given pre- and post-visit surveys, 173 paired surveys were complete and usable (60% of all clerks and 66% of those who actually visited the hospital). The study group was 65% men (n = 112), 35% women (n = 61); 88% white, 3% black, 9% other. Mean age was 26 years (range 21–40). A repeated measures multivariate analysis of variance (Wilks' Criterion) showed there was a strong and significant overall effect on responses as measured by pre- and post-visit surveys (F [7,166] = 5.75, P < 0.0001). The students reported more favorable views after the visit. The mean values for each item response before and after the visit are also presented in Table 1.

Analysis of the means for the questions during the pre-visit survey shows a significant difference (P = 0.0001); that is, some pre-visit survey questions were rated more positively than others. Question number 6 had the most positive initial rating and exhibited a positive shift in the post survey. Question 1 had the lowest pre-visit score and did not exhibit any shift in the post survey after the site visit. On a more personal note, a number of students wrote comments on their surveys or separate letters to their psychiatric education director. One student wrote that, "[the] staff was very helpful and enthusiastic." Another was so pleased with
the experience as to call the day "a unique learning experience" and suggested that students spend their whole rotation "out at the hospital."

**DISCUSSION**

We found that the students had a low interest in either a psychiatric career or a public-sector hospital practice before the state hospital visit. The visit did not change this. However, the students' perceptions of the abilities and attitudes of the state hospital's professionals and its physical facilities were positively changed by the visit.

It has been suggested that more attention be given to ensuring that psychiatric trainees are assigned experiences in working with the chronically mentally ill (6). At MCV, including a state hospital experience has become increasingly important to psychiatric students and residents. A number of our residents have reported that the state hospital rotation has become a key factor in their choosing public psychiatry as a career; this also has been found at other institutions (7). As attitudes toward psychiatry and considerations of career choices are in part developed during the clerkship, future physicians and other health care providers should be afforded exposure to career options in the public sector, including the state mental hospital.

As a result of direct feedback from students, the data presented in this report, and input from involved professionals and administrative faculty, our state hospital-university collaboration has been expanded to include the regular assignment of medical students to clerkship rotations at the hospital. We hope that a full clerkship experience at the hospital will motivate some of these future physicians to consider a career in public psychiatry. Further, integration of site visits to state hospitals into the medical student and psychiatric resident academic curricula has been accomplished by joint faculty (those at both the medical school and state hospital). This also involves the inclusion of public mental health perspectives in didactic material presented to all psychiatric clerks and residents.

Because the views measured were measured one week after the hospital visit, we do not know whether the changes in the students' preconceived ideas about the state

<table>
<thead>
<tr>
<th>TABLE 1. Survey questions, verbal anchors, and mean response values (N = 173)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey Question</td>
</tr>
<tr>
<td>1. How likely is it that you might pursue a career in psychiatry?</td>
</tr>
<tr>
<td>2. No matter what area of medicine you eventually select, how likely is it that you would pursue a public hospital position?</td>
</tr>
<tr>
<td>3. What level of care do you believe is provided at a state hospital?</td>
</tr>
<tr>
<td>4. How responsive do you think state hospital patients are to active psychiatric treatment?</td>
</tr>
<tr>
<td>5. What do you think the attitude of employees at a state hospital is?</td>
</tr>
<tr>
<td>6. How well trained do you believe state psychiatric hospital professionals are?</td>
</tr>
<tr>
<td>7. How would you rate the physical facilities at a state hospital?</td>
</tr>
</tbody>
</table>

"P < 0.05; "P < 0.0001
hospital are lasting or short-lived. This report shares the limitations of all self-report measures; our Likert scales were new and untested in this study. We note that the sample consisted of primarily white men. The socioeconomic status of the student sample was not measured, nor was previous exposure to mental hospitals (visits, employment). Nevertheless, the data support the concept that an educational program designed to change preconceived negative ideas about a state mental hospital can be successful and rewarding.

References

New Idea

Using the Objective Structured Clinical Examination in a Psychiatry Residency

Earl L. Loschen, M.D.

Evaluation of psychiatric residents' clinical skills and knowledge is important to assure faculty that residents are achieving competence. Because psychiatric residents perform many activities without direct observation, it is necessary to construct techniques that allow careful objective evaluation of their performance. This article describes how one residency program developed an Objective Structured Clinical Examination (OSCE) to assess the clinical skills of its PGY-2 and PGY-4 psychiatric residents.

The special requirements for psychiatric residency of the Accreditation Council for Graduate Medical Education specify that the cognitive knowledge of each resident must be formally examined at least annually during the second to fourth years of training and that an organized examination of clinical skills must be given at least twice during the 4 years of residency. By formally examining residents' knowledge and skills regularly during training, it is hoped that areas of their professional performance that need improvement and areas of strength can be identified. After describing the poor correlation between various examination techniques for measuring knowledge and clinical skills, Ginsburg (1) recommended that clearly defined criteria be used to measure performance. Further, he said that such evaluations should occur frequently and be validated by objective measures whenever possible.

Accurate evaluation of the performance of psychiatric residents is a difficult task. Performance evaluations that use objective means, such as written multiple-choice questions and patient management problems, do not correlate well with clinical performance (2–4). Subjective evaluations by supervisors are associated with large intr résident variations. This seems to occur because factors other than the residents' abilities commonly influence the ratings and may cause supervisors to be unable to discriminate among important aspects of clinical performance (5).

Various new procedures have been initiated to evaluate psychiatric residents' progress and to better prepare them for board certification examinations and clinical practice. A "mock board" is one such examination that assesses a resident's interviewing technique and clinical skills (6). The mock board examination consists of the resident performing a brief patient interview, which is followed by an oral examination about the interview, diagnosis, and treatment plan appropriate to that patient. The procedure may be used to evaluate a resident's clinical skills and training progress. However, case specificity has been identified as a prominent feature of physician performance (7) and because the mock board examination typically will only test each res...
ident with one or two cases, reliability of ratings can be problematic.

THE OBJECTIVE STRUCTURED CLINICAL EXAMINATION

Another examination currently being used to assess clinical competence is the Objective Structured Clinical Examination (OSCE) (8). The OSCE is used to measure specific aspects of clinical skill in short (5-15 minute) sessions that use examination "stations."

Evaluation and treatment skills for a variety of conditions can be measured this way. The examination is designed to assess the resident’s abilities to conduct an interview, elicit pertinent data (including history-taking and physical examination), interpret the data, formulate a diagnosis, and manage the patient’s problem as would be required of a practicing clinician (8).

Faculty decide beforehand what skills and knowledge need to be evaluated and then devise an appropriate number of stations to test these competencies (8,9). An OSCE may use a variety of data sources and activities in its stations, for example, standardized patients (SPs), results of laboratory investigations, videotapes, emergency scenarios, and so forth. The examinee’s performance likewise can be evaluated by a variety of procedures, including the use of checklists completed by trained observers and/or the SPs themselves, resident write-ups of interviews, post-activity tests using essay or multiple-choice questions, or oral examinations immediately following the activity. The criteria for the acceptable level of performance for each station are set before the examination (8-10).

The OSCE is comprehensive, fair, and objective. Although it is demanding of faculty time and initially time-consuming to set up, the benefits of the OSCE seem to outweigh the disadvantages (11,12). The examination format makes it possible to separately analyze the examinee’s strengths and deficiencies in both technique and performance. This provides the opportunity for specific feedback so that deficiencies can be corrected and strengths emphasized (13). By clearly deciding which skills, knowledge, and abilities are to be assessed, and by controlling the variability otherwise introduced by examiner and patient, the procedure can easily be repeated and therefore more uniformly assess groups of residents (9).

AN OSCE FOR PSYCHIATRIC RESIDENTS

Since 1985, the Department of Psychiatry at the Southern Illinois University School of Medicine has used an OSCE to assess the clinical skills of its second- and fourth-year residents. Separate examinations have been constructed for these two groups. The examination for second-year residents emphasizes skills related to neurology, emergency psychiatry, and the assessment of psychotic patients. The examination for fourth-year residents emphasizes skills related to outpatient psychiatry, a broad range of diagnostic categories, and child and adolescent psychiatry. Each examination contains 6 stations and each is 40 minutes long, allowing the examination to be administered in 6 hours for up to 8 residents.

A "blueprint" is developed for each station by the faculty member who provides the actual case (examples of a case blueprint, “simulated patient” feedback form, evaluation checklist, and rating strategy for the case are shown in Appendixes 1-4). The blueprint specifies the important characteristics of the patient problem, the clinical competencies to be assessed, and an acceptable level of performance. Criteria for this performance are set before the examination and are based on the written objectives of the residency program.

Specific tasks are outlined at each station for the resident to perform. For example, at one station a videotape of a patient with schizophrenia is shown. The examinee is instructed to 1) review the tape, 2) write a
complete mental status examination, 3) list a differential diagnosis, and 4) indicate the most likely diagnosis. A checklist is used to score the write-up on completeness and accuracy. The criteria for scoring are set prior to the examination, and several faculty take that station’s examination to validate it before its inclusion in the OSCE.

Recent PGY-2 examinations have consisted of six stations, with the first station as just described. At the second station, the residents are provided with various laboratory and test results to interpret, such as several Minnesota Multiphasic Personality Inventory (MMPI) profiles, an MRI, a sample of an EEG tracing, three CT scans, and several hematology and endocrine laboratory results. A third station requires the resident to return an emergency phone call to a nursing home where a geriatric patient has become aggressive. The resident speaks with the nurse and must make some preliminary interventions. A fourth station presents an acutely ill neurological patient with transverse myelitis, which requires the resident to do a brief (20 minute) work-up and then respond to a series of multiple-choice and short-answer questions covering relevant diagnostic and treatment issues. The fifth station presents a depressed patient and the sixth an anxious patient who is a potential admission in an outpatient setting. At each of the last two stations, the resident has 20 minutes to complete a focused work-up of the patient or situation and an additional 20 minutes to write up a differential diagnosis and treatment plan. These write-ups are graded by comparing them to predetermined criteria contained in a checklist. Because most of the stations have preset criteria that have been developed by faculty, most of the grading is done by support staff; only those answers considered ambiguous require faculty time to grade.

The PGY-4 examination has concentrated on brief but complete encounters with SPs. At each station, the resident has 20 minutes to interview the SP and is then required to complete a brief, written summary of the case, a diagnostic formulation including appropriate psychodynamics, and a preliminary treatment plan. As in the PGY-2 examination, these write-ups are graded by using a checklist of the data gathered, but faculty also read them for issues related to the diagnostic formulation. The following SP simulations in six stations were used at a recent PGY-4 examination: 1) a young man with panic disorder; 2) an elderly woman with Alzheimer’s disease; 3) a borderline woman who is chronically suicidal; 4) a 40-year-old woman with bipolar depression; 5) an adolescent girl who is suicidal and has an adjustment disorder; and 6) a 35-year-old man with chronic schizophrenia who presents to an emergency room complaining of hallucinations. All patients were portrayed by actors carefully trained by the faculty member who had personally cared for the actual patient on which the simulation was based to ensure that the patient’s problem was accurately displayed.

In both OSCEs, the stations are designed to evaluate the required skill by a variety of means. In addition to the evaluation write-ups just described, the SPs are trained to use a checklist to rate critical elements of the interview. At other stations, a checklist is completed by an observer (behind a one-way mirror or videotaped). At the laboratory and diagnostic procedures station, the residents record their interpretation of laboratory results, which are later scored by a faculty examiner for accuracy.

At the end of the examination, each station is scored and a profile of the resident’s performance is constructed. These results are discussed with each resident individually and are also forwarded to our residency promotions committee for review.

OUTCOMES

The examination has now been used for 6 years with senior residents (n = 25) and 3 years with second-year residents (n = 18).
Our experience with this examination format for formative evaluation has been quite favorable. The OSCE has been able to identify significant areas of strength and weakness in resident performance and in our training program that would have gone unnoticed, except for the examination. For example, one resident previously seen by faculty as very weak in emergency psychiatry did quite well on the examination station that involved managing an emergency phone call. In another instance, when early groups of residents did not do well in their diagnostic assessment of a young woman with borderline personality disorder, feedback to the faculty resulted in both increased clinical and didactic exposure of residents to borderline patients. Recent evaluations have shown that residents now do better at the station with a borderline patient.

We have been less successful in using the OSCE for summative evaluation. We attempted a rough comparison of the performance on the OSCE of three resident classes \(n = 15\) with their ratings from various clinical rotations and their psychotherapy supervision. The classes chosen for these comparisons were the PGY-2 class of 1985, the PGY-2 class of 1988, and the PGY-4 class of 1989. These comparisons were complicated because performance on the OSCE is not easily categorized and often is much more meaningful when particular aspects of a resident's performance are examined rather than the simple pass or fail decision at a particular station. Our residency program rates clinical rotation performance and psychotherapy skills on a 5-point scale (1 is unacceptable; 5 is outstanding). Residents must score a 3 for satisfactory performance. Setting performance standards on the OSCE has been a major challenge for faculty. Performance criteria are established before the examination is given. When the 5-point scale was used to rate global performance on the OSCE, the average rating for performance for the three classes was very low. In the first year the OSCE was given, the performance ratings were unacceptable (no residents passed). By the second OSCE, the average score was 1.4 (one of five residents passed), and by the third examination the average score was 1.7 (two of five residents passed). For these same residents, the average performance rating for all clinical rotations was 3.8 and for psychotherapy supervision was 4.4. This striking difference between the global OSCE ratings and the clinical ratings by unit chiefs and supervisors was carefully reviewed by faculty who decided that until we are able to set OSCE performance standards that are more indicative of acceptable performance, OSCE results will be used solely for formative feedback to residents.

These three classes of residents were requested to provide structured written feedback on the OSCE experience. The first class of residents \(n = 5\) to take the examination was asked to rate particular aspects of the examination as either positive or negative. There was a return rate of 60% for this class. When using a scale of 1 for positive and 0 for negative, the overall OSCE received a 1.0 rating as did the videotape and the SP stations. However, in this early examination, one station that used a written case history and summary received a 0.33 rating from the residents who found it confusing. This station was dropped.

Two subsequent classes of residents were polled about the OSCE using a more structured evaluation instrument. Again, using a scale of 1 for positive and 0 for negative responses, the residents were asked to comment on various aspects of the OSCE. For the first of the two classes (each with 5 residents), there was a return rate of 100% and for the second a return rate of 80%. Both classes gave the overall examination a 1.0 rating. The first class gave only a 0.40 rating to the question about adequate time for the examination, but the second class rated this item as a 1.0. The first group rated the quality of the SP's 0.80, which in our experience is a very good rating, while the second group gave this item a 0.50 rating. In relationship
to perceived fairness of the examination, one class rated this item as a 0.80, but the other was more concerned with this issue and gave it only a 0.50 rating.

**DISCUSSION**

There are many relevant issues that arise whenever a new evaluation format is used to assess the academic performance of trainees. These issues include reliability of the examination, validity of the measures, relevance of the test, and cost and benefits of the assessment procedure. These issues will be examined in relation to the OSCE format.

The development of reliable measures of clinical performance in residency training is fraught with difficulties. Residency training directors are well aware of the great variation in ratings of clinical skills from one supervisor to another and how even more unreliable these ratings become when supervisors are not in a position to directly observe resident performance. This is often the case in psychiatric residencies where residents may see many patients in individual psychotherapy or on inpatient wards without direct observation. Likewise, the use of “mock boards” raises concerns because of the limited number of patients seen by any single resident and the large role that patient and examiner variability can play in this format. The use of the OSCE format addresses these issues specifically. First, the performance of the resident on any one station can be observed in several ways: direct observation by faculty, observation by trained staff, or structured feedback from trained SPs. Second, acceptable performance at a station is specified prior to the examination, thereby eliminating variation in the interpretation of adequate performance by different faculty members. Finally, the OSCE format allows for more samples of behavior, thereby reducing the risk that a resident’s poor performance will result from a particular patient assigned to the examination.

Although the OSCE technique can conceivably improve the reliability of a clinical examination, our own experience does not allow us to formally evaluate this. Our examination is short (only six stations) and has been given to only a small number (n = 43) of residents. In a multiple-station examination (similar to an OSCE) given to a class of medical students, a test of 20 stations attained a generalizability quotient (a type of measure of reliability) of only 0.60 (10). Our examination is less than one-third the length of that examination; therefore, we could anticipate that variance in performance due to error in our OSCE is greater than we would like. We do feel, however, that the OSCE increases reliability sufficiently, in comparison to uncontrolled supervisor’s evaluations, to warrant its continued use. Our finding that clinical and supervisory ratings did not correlate well with OSCE results may indicate that these evaluation approaches measure different aspects of resident performance.

The length of our test has been set at six stations for a number of practical reasons. First, it allows the examination to be given to a class of residents in half a day. This is a major benefit considering the variety of clinical responsibilities that residents have. Second, this length of examination is manageable for one or two faculty members and two staff members or secretaries to administer. Third, this number of stations is relatively easy to design and develop. As the number of stations increases, the complexity of examination design, training, and arrangements also increases, making it more difficult for a residency program to use this type of evaluation instrument.

Costs for the OSCE have not been great. Design of a station may take from 5 to 10 faculty hours, depending on the station’s complexity. This time includes tasks such as identification of a case and write-up of a blueprint (1–2 hours); training of SPs, if indicated (2 hours); development and testing of the station (2 hours); and the training of any required observers (2 hours). This expendi-
ture of faculty resources is diminished when the station is reused in subsequent examinations. Although we use “actor” patients, this particular technique is not required in an OSCE. A “real” patient who has been instructed to give the same set of responses consistently (standardized) could conceivably be used with equal effectiveness if the patient is trained using the techniques developed by Barrows (14). We have traditionally paid our SPs (all volunteers) minimum wage. Faculty time required on the day of administration has been no more than that allocated for administration of the yearly Psychiatric Residency In-Training Examination (PRITE), as we rely heavily on checklists, multiple-choice and short-answer questions, and trained observers. Due to this examination structure, scoring the entire OSCE typically requires only an hour or two.

One issue in station design deserves special comment. Faculty often have the tendency to select unusual or rare cases. This is best avoided, as the goal of our examination is to test residents in clinical situations relevant to their training and practice. Validity of the examination is compromised if the test situation deviates markedly from that goal.

Our program has chosen to use the OSCE format for a variety of reasons. We are able to test residents in a number of relevant clinical situations in a short period of time. The clinical situations are accurate and realistic and can be tailored specifically to the training level of the residents tested. What is now needed is to test the examination’s reliability. The next step is to involve several residency programs in a similar OSCE so that sufficient numbers of examinees can be evaluated using this technique.

References

Q and A

Frequently Asked Questions About the Residency Review Committee

Stefan Stein, M.D.

Q: What is the Residency Review Committee and what does it do?

A: The Residency Review Committee (RRC) in psychiatry is a committee of the Accreditation Council for Graduate Medical Education (ACGME) charged with the responsibility in this country for both developing accreditation standards and monitoring the quality of residency programs in general psychiatry and child and adolescent psychiatry. In addition, as the American Board of Medical Specialties approves new subspecialty areas requiring fellowship training, such as geriatric psychiatry and addiction psychiatry, the RRC develops standards and accredits and reviews these new programs.

The American Board of Psychiatry and Neurology (ABPN), in contrast, certifies individuals in general psychiatry and child psychiatry, as well as in neurology and child neurology. In parallel manner, the ABPN is developing examinations for individuals seeking certification of added qualifications in the new subspecialty areas.

Q: How does the RRC conduct its accreditation process?

A: The RRC develops and publishes special requirements, called the Special Essentials, that are guidelines for training in each program it monitors. Using the standards of these Essentials, with information provided by the program director, the RRC carries out a review process that includes a site visit and a minimum of two independent reviews by RRC members of all available information. Finally, the full RRC considers all data in judging the program’s success in providing an educational experience according to the Essentials. In addition, the institution in which the program is sited must meet the ACGME standards as a training institution in a separate review process.

Q: What questions do residents most frequently pose to the RRC?

A: The Executive Secretary of the RRC for psychiatry frequently gets questions from program directors and residents regarding the acceptability of specific individual programs. Individual residents ask the Executive Secretary about their rotations, about plans to transfer from one program to another and, more generally, about what they must do to meet programmatic requirements. Residents often call the Executive Secretary’s office concerned about the acceptability of their individual training to the ABPN for its certification examination.

However, residents and their training directors should be aware that the RRC does not ever accredit any individual resident’s training. The RRC is concerned only with accrediting training programs, that is, ensuring that programs meet the required standards. As a part of that process, the RRC’s site visitor will review individual records of residents and interview them to ensure that the program is carrying out its functions properly. But it is, ultimately, the responsibility of the program director to make certain that each resident’s experience meets the program’s requirements. If that is the case, and the program is accredited, then the indi-
A: The Special Essentials states simply that, "(3.B) A minimum of two months of neurology, or its full time equivalent on a part-time basis, is required prior to the completion of training. It is strongly recommended that this experience occur during a psychiatric first postgraduate year. For residents transferring into a program, there must be documentation in the training record that they have met this requirement in either current or prior training."

The question of the precise site and form that this experience should take is left to the discretion of the training program director. Of course, it is expected that program directors will construct a neurology experience that meets the overall goals of residency training in psychiatry; that is, the experience should equip the prospective psychiatrist to recognize and evaluate neurological conditions, to provide such treatment as may be required in a psychiatric setting, and to be familiar enough with the field of neurology so as to be able to make referrals and to work collaboratively with neurologists in treating patients with mixed disorders.

Although there is no one correct experience that alone will guarantee the desired outcome, it is clear that every contact with a neurology service will not lead to the desired educational result. It is thus the responsibility of the program director to think through the problem and to devise solutions that will successfully use available clinical resources and faculty. I will illustrate this by answering some of the frequently asked questions about the neurology training requirement.

Q: What should be the training role of the psychiatry resident in neurology?

A: If we accept that the training goal is to become familiar with neurological diagnosis and treatment, the psychiatry resident needs to be actively involved, rather than function-
ing only as an observer, on a neurology service. Thus, the RRC in examining a neurology rotation would look for the resident’s active participation in the evaluation and treatment of patients, wherever the service and whatever the age group of the patients.

Q: Can the neurology rotation be a few hours per week?

A: Training directors, in posing this question, might ask themselves whether such a part-time plan includes an experience that is sufficiently concentrated to be educationally significant; that is, will the resident be immersed sufficiently to develop the ability to “think neurologically” about patients. The training director should consider whether the planned rotation will have a “critical mass” of clinical experience and learning with each encounter. Seeing one patient per week in a diagnostic setting is not likely to achieve that goal. But a block of concentrated work, lasting 3 or 4 hours per week with a number of patients under a neurologist’s close supervision, would be more likely to achieve that educational “critical mass.”

Q: Can neurology training be just outpatient or just inpatient?

A: Again, the goal of the experience must be considered in determining the patient population that the residents will treat. Residency training directors are, of course, limited in planning rotations by the particular clinical setting in which they work. But the training director should ask what range of experiences the resident will have in a given setting, whether with outpatients or inpatients. Either an inpatient or an outpatient setting could meet the goal of a good neurology experience; it is up to the training director to determine if key questions about the rotation’s educational adequacy (e.g., how many patients, with which diagnoses, over what period of time) can be satisfactorily answered in a particular setting.

Q: Must neurology training include child patients? Can residents entering child psychiatry training take a child neurology rotation to fill the neurology requirement?

A: Training directors here must consider what they think is appropriate neurology training for every psychiatrist. Because PGY-1 residents who plan to enter child psychiatry may or may not do so, a training director who includes only child neurology in the neurology experience may be compromising a graduate’s training. In addition, those who enter child psychiatry also work with adults. Will the overall experience equip the resident to function as a general psychiatrist? It is up to the training director to explore the details of each clinical rotation and decide if it meets this criterion.

Q: Who must supervise the neurology experience?

A: This question requires the same approach. The supervisor should be a person who is academically and clinically qualified to teach neurology. That is most likely to be a board-certified neurologist, but the RRC expects that the training director will review the possible supervisors and identify those who are qualified to teach and supervise (perhaps asking colleagues in neurology to assist in that task), paying special attention to their willingness to provide the necessary time to psychiatry residents and to their prior experience as educators.

Q: Does the above example suggest an orientation toward the RRC review process?

A: The training director who has thought through the answers to questions such as those above about each required training experience will be in an excellent position to support his or her program decisions to the RRC when it examines the program, either for initial or continuing accreditation. The RRC does not dismiss out-of-hand a choice
that a training director has made, even if it may appear unorthodox, if it is supported by an educational rationale that does not violate any absolute standards and meets the goals of the educational program. Although deviations from the standards of the Essentials may lead to a negative action by the RRC, a process of self-examination by the training program about its specific training experiences most often will lead the training director to the same conclusion the RRC would reach in answering the basic question: Does this training experience meet educational goals and remain within the requirements as stated in the Essentials.

The Essentials should be viewed as an outline to be used to stimulate a continuing process of self-examination by training directors as they design and revise their programs. The stimulus should always lead to a question about the educational appropriateness of a particular rotation and its place in the overall training program. In that way, the intention of the Essentials—to guarantee that residency training programs provide comprehensive, effective, and sound educational experiences—will be furthered.

Dr. Stein is clinical professor of psychiatry at Cornell University Medical College and director of residency education at the New York Hospital, Cornell Medical Center, Payne Whitney Clinic.

Dr. Stein is a member of the Residency Review Committee for psychiatry; however, the opinions expressed in this column are his own and do not reflect the official policy of the Residency Review Committee or the Accreditation Council for Graduate Medical Education.
Dorthea Juul, Ph.D.
Abstract Editor

Albanese MA, Mitchell S: Problem-based learning: a review of literature on its outcomes and implementation issues. Academic Medicine 1993;68:52-81

One of the most significant innovations in medical education in the past 20 years has been the development of problem-based learning (PBL) curricula, with leadership provided by Harvard University, McMaster University, Michigan State University, and the University of New Mexico. Albanese and Mitchell undertook this extensive literature review and meta-analysis to answer questions about PBL posed by their faculty who were engaged in curricular renewal. The authors define PBL as:

...an instructional method characterized by the use of patient problems as a context for students to learn problem-solving skills and acquire knowledge about the basic and clinical sciences. (p. 53)

PBL relies on active student participation in small tutorial groups and independent study with the role of faculty to facilitate and guide rather than to provide information and solutions. Emphasis is placed on the integration of the basic and clinical sciences and on the development of lifelong learning skills.

The authors present data about the outcomes of PBL in 11 areas and about implementation issues, such as the costs of PBL compared to conventional curricula. Some of the more salient findings from the review are highlighted here.

PBL students tend to do less well than conventional curricula students on basic science examinations, although this is not always the case, and there is some trend in their favor on clinical science examinations and clerkship evaluations. Data from studies of cognitive processing suggest that the PBL students may have deficits in their knowledge structures and reasoning processes. On the other hand, there is a trend toward higher ratings for PBL graduates by their clinical supervisors, which would not be expected if they lacked diagnostic acumen.

A positive aspect of PBL is the generally high level of student and faculty satisfaction. Students enjoy the small-group interactions and atmosphere of PBL, and faculty find it a rewarding way to teach, primarily because of the personal contact with students. Graduates do not feel less well prepared than their colleagues from conventional curricula and compare favorably in their rate of receiving first choice of residency.

Not enough research has been done to draw any solid conclusions about the effect of PBL on practice performance, although one study did show increased resource utilization by PBL graduates. In addition, PBL curricula, probably because they have often been coupled with a primary care or community orientation, do tend to produce more family physicians.

In terms of implementation, the few reports that are available suggest that the technique is more expensive than traditional methods because of increased faculty effort, particularly when class size exceeds 100, and less efficient in content coverage.

The authors note that not much information is available on the selection and development of the specific problems, especially about how to provide adequate content coverage. The role of faculty is also open to debate because not enough research has been done to prescribe how problem-solving sessions should be conducted. Experience with the method does suggest that faculty
will usually need training for their new roles.

Another unanswered question is whether faculty need to be expert in the content area under consideration. Expert tutors tend to be more directive and less facilitative than nonexpert tutors, yet this guidance may result in enhanced learning as relevant issues are identified and errors are corrected. Students typically rate expert tutors higher than nonexperts.

The authors conclude that caution should be exercised in implementing PBL because "questions remain" about whether students are adequately equipped by such an approach (p. 78). They suggest a hybrid approach that combines faculty-directed study with a PBL experience. A significant issue for future research is institutional effect, as only a small number of schools are reporting on PBL, and their approaches to implementation may vary considerably.


This supplemental issue of Academic Medicine contains a number of essays and empirical studies on the relationship between performance in medical school, residency, and practice. The issue begins with two essays that outline the many methodologic as well as substantive issues that underlie the lack of solid evidence about the relationship between performance during and after medical school. As McGuire states, "our search for predictors of professional performance has met with only very limited success" (p. S3).

The next section is titled "Nonempirical Perspectives" and contains three articles, the first of which makes the point that traditional methods of measuring competence, such as performance on board-certifying examinations, will be supplanted by ongoing quality-of-care assessment in both hospital and ambulatory care settings. Undergraduate and graduate medical education do not yet adequately expose trainees to the concepts and tools of quality improvement and performance assessment. The second essay addresses the inadequacy of assessment procedures in medical education that rely on multiple-choice questions, and the third section discusses the role of the basic sciences in the practice of medicine.

The section with empirical findings contains nine articles, five of which analyze the relationship between performance in medical school and performance after graduation. Medical school variables included preclinical grade-point averages (GPAs), clerkship GPAs and ratings, National Board of Medical Examiners (NBME) Part I and Part II scores, and scores on intramural examinations. Residency performance was assessed by supervisors' ratings of competence and performance on NBME Part III.

The editors provide a useful summary of these studies. Across all five institutions (University of Missouri-Kansas City, The Medical College of Georgia, Jefferson Medical College, Wright State University, and Southern Illinois University), 75% of the students who were top scorers in medical school were top-rated in residency, while 25% were bottom-rated. The pattern was less consistent for the bottom scorers in medical school—61% of them were also bottom-rated in residency, but 39% were top-rated. (The inconsistency may be due to the lower participation rate of low scorers in medical school.) A power analysis and a global meta-analytic study of these data lend further support to the conclusion that there are statistically significant relationships between assessment during medical school and ratings of clinical competence in residency.

Another study in this section found significant correlations between scores on NBME Parts I and II and scores on specialty board examinations in orthopedic surgery,
dermatology, and preventive medicine. Both Part I and Part II scores predicted specialty board performance, with Part II scores being a somewhat better predictor. Furthermore, examinees with Part I or Part II scores below 400 were at much greater risk for failing the specialty board examinations.

Gonnella and his colleagues argue that the conceptual reasons and the empirical data presented in these articles lead to an optimistic conclusion:

Our medical schools are educating physicians who perform in a manner consistent with the evaluations made in medical school. This is encouraging, and it indicates that there is validity to our educational activities and their assessments. (p. 579)

They end with a review of the issues that the next generation of researchers should address.


Edwards and her colleagues used the critical incident technique to define the components of general surgery competence for house officers. These components then served as the basis for developing instruments for selecting and evaluating residents.

In the first phase of the project, the researchers interviewed 10 general surgeons on the faculty at St. Louis University and 4 chief surgery residents. The surgeons were asked to reflect over the past year and to describe effective and ineffective resident behaviors. Effective actions were those they would want all residents to perform, and ineffective actions were those they would never want repeated. The interviews lasted approximately an hour, and each yielded about 16 critical incidents (CIs) for a total of 235. An example of a CI in which the resident was effective is:

A resident says “I don’t know” or “I’ll check that” instead of covering up and being dishonest. (p. 81)

An example of ineffective behavior is:

A lower-level resident lost control and slapped a patient in the emergency room. The patient was belligerent and drunk, but the resident should have walked away from him instead of slapping him. (p. 82)

In the next phase of the study, 7 of the 10 general surgeons sorted the CIs into categories, which they then named. The researchers reviewed the categories, assigned CIs to the categories, and made some modifications that were examined by the residency director and an additional surgeon. The categories were then presented at a faculty meeting for final review and approval.

The 12 final categories were 1) knowledge/self-education, 2) clinical performance, 3) diagnostic skills, 4) surgical skills, 5) communication skills, 6) reliability, 7) integrity, 8) compassion, 9) organization skills, 10) motivation, 11) emotional control, and 12) personal appearance. The authors note that 59% of the CIs were sorted into noncognitive categories, while the categories of knowledge/self-education and diagnostic and surgical skills contained 21% of the CIs.

An instrument for residency applicants was created that included the categories that could be assessed in an interview. The evaluation instrument for residents contained the same categories, plus the behaviors requiring observation. Both instruments used 7-point Likert-type scales with verbal anchors for the scale points. In addition, a handbook and a training session were developed to enhance faculty interviewing skills.

The authors are engaged in additional research to determine if the tighter linkages between selection and assessment criteria prove to be beneficial.
Attending Psychiatrists’ vs. Residents’ Knowledge of Geriatric Depression

SIR: As the U.S. population ages, we can expect an increasing prevalence of depressive illness among older individuals who are at risk for developing a depressive disorder subsequent to multiple medical problems such as stroke (1,2). Because the field of geriatric psychiatry is relatively young (3), the inclusion of didactic material concerning the diagnosis and treatment of affective disorder in older persons has not been incorporated into all psychiatry residency training programs. Specific curricular content in geriatric psychiatry has been suggested (4–6), and key issues in education and training in geriatric psychiatry are discussed by Marin et al. (4) and Lazarus and Weinberg (5). In this letter, I report on the introduction of geriatric psychiatry content into one program in San Antonio, Texas.

The geriatric psychiatry curriculum consisted of special 2-month and 6-month rotations in the geriatric psychiatry clinic. Evaluations of older patients referred by psychiatrists or other physicians were completed in conjunction with the attending geriatric psychiatrist. Residents received supervision of their psychotherapeutic work with older patients in individual, family, and group psychotherapy. A didactic seminar composed of 12 two-hour lectures in geriatric psychiatry was taught during the spring term of the academic year for residents in PGY-3 and -4. Grand rounds on depression and dementia were presented. Two additional departmental grand rounds were devoted to research activities by the geriatric psychiatry attending, involving the work of residents and medical students who completed rotations in the geriatric psychiatry program in San Antonio, Texas.

The focus of this study was to establish whether the introduction of geriatric psychiatry content into the psychiatric residency training program at the University of Texas Health Science Center at San Antonio resulted in residents having a greater knowledge of geriatric psychiatry and greater clinical skill, than attending psychiatrists, in managing older patients.

Although the knowledge gained over the years of residency training is assumed to be cumulative, there is no formal mechanism in most programs to assess the residents’ intellectual synthesis of their didactic and clinical experience (5–8). A questionnaire was developed to determine to what extent psychiatric residents, in comparison to psychiatric attendings, had information about the evaluation and treatment of depression in older patients.

The questionnaire content assessed knowledge of the epidemiology of depression, the diagnosis and treatment of late-life depression, and the psychopharmacotherapy of late-life depression. The questionnaire was administered to all attendings present at a monthly meeting of the psychiatric faculty and at one of the weekly psychiatric residency meetings. Nonparticipation was indicated by return of a blank questionnaire to the author at the end of the meeting.

Twenty-one attendings and 23 psychiatric residents completed the study instrument; 8 attendings and 4 residents declined to participate. Differences among the mean scores (71) of the PGY-3 and -4 residents (seniors), the mean score (65) of the PGY-1 and -2 residents (juniors), and the attendings (64) were not statistically different ($F = 1.35; df = 2, 41; P = 0.27$, NS). When the standard deviations (the spread of scores) between the groups were compared, a difference was observed. The standard deviation of the attending psychiatrists (15.13) was twice that of the junior residents (7.76) and 1.7 times that of the senior residents. Although the junior residents had less exposure, the attendings had had the least exposure. The knowledge of psychiatric attendings was based upon their clinical practice, attendance at grand rounds, and ongoing clinical...
contact with older patients, which varied for each attending. These results suggest that the more intensive the exposure of specific materials on geriatric psychiatry the greater the knowledge and the better the clinical management of older patients.

One area of concern emerged from the study. Both attendings and residents had difficulty identifying antidepressant side effects that could produce cognitive changes in older patients (9–12). Changes in cognitive function in older persons is a sensitive indicator and may reflect a broad range of etiologies, including psychopharmacologic effects. The results of this study identify the need in this setting for an increasing emphasis on geriatric psychopharmacology for psychiatrists in training and in practice.

F. M. Baker, M.D., M.P.H.
University of Maryland, Baltimore

References


SIR: The chief residency position in psychiatry is considered important to the welfare of the institution and junior residents (1,2). Many have written on the merits and drawbacks of the chief residency, with recommendations to improve the position. The chief resident is expected to be teacher, advocate, and protector; to enhance clinical operations and handle small problems before they come to the attention of senior staff; to facilitate communication, model for junior residents, and perform important administrative duties (1,3). However, most of these expectations have been culled from faculty, administrators, and junior residents. Rarely have the opinions of former chief residents been solicited in studies, even though their ideas may be the most meaningful. Although the attitudes of others are important, they may not accurately reflect the ultimate educational value of the chief residency for the individual who chooses to undertake the job. The sole report of former chief residents found some satisfaction with the role but focused mainly on the impact of gender on the experience (4). Furthermore, although the Commission on Graduate Medical Education in 1940 defined the chief resident’s role to include “personal expertise in the specialty,” little attention has been given to what this position provides toward the career development of the individual who
contact with older patients, which varied for each attending. These results suggest that the more intensive the exposure of specific materials on geriatric psychiatry the greater the knowledge and the better the clinical management of older patients.

One area of concern emerged from the study. Both attendings and residents had difficulty identifying antidepressant side effects that could produce cognitive changes in older patients (9–12). Changes in cognitive function in older persons is a sensitive indicator and may reflect a broad range of etiologies, including psychopharmacologic effects. The results of this study identify the need in this setting for an increasing emphasis on geriatric psychopharmacology for psychiatrists in training and in practice.

F. M. Baker, M.D., M.P.H.
University of Maryland, Baltimore

References

The Postresidency Perspective of the Psychiatric Chief Resident

SIR: The chief residency position in psychiatry is considered important to the welfare of the institution and junior residents (1,2). Many have written on the merits and drawbacks of the chief residency, with recommendations to improve the position. The chief resident is expected to be teacher, advocate, and protector; to enhance clinical operations and handle small problems before they come to the attention of senior staff; to facilitate communication, model for junior residents, and perform important administrative duties (1,3). However, most of these expectations have been culled from faculty, administrators, and junior residents. Rarely have the opinions of former chief residents been solicited in studies, even though their ideas may be the most meaningful. Although the attitudes of others are important, they may not accurately reflect the ultimate educational value of the chief residency for the individual who chooses to undertake the job. The sole report of former chief residents found some satisfaction with the role but focused mainly on the impact of gender on the experience (4). Furthermore, although the Commission on Graduate Medical Education in 1940 defined the chief resident’s role to include “personal expertise in the specialty,” little attention has been given to what this position provides toward the career development of the individual who
serves in the role (5). Some research, not in psychiatry, suggests that chief residencies do enhance administrative skills (6).

With these facts in mind, we surveyed former chief residents and former non-chief residents of a large psychiatric residency training program for their opinions on the career value of a chief residency. We hypothesized that most former chief residents would believe the position had significantly aided their career.

The UCLA general psychiatry residency program offers a variety of chief resident positions for PGY-4. All chief residencies are 1 year long, are voluntary, and involve clinical, administrative, and teaching responsibilities. Selection of the chief residents begins during PGY-3. The posts are individually offered by faculty to residents, who can accept or reject the offer. Each year, approximately 60% of senior residents in this program do a chief residency.

A questionnaire about the chief resident role was mailed to the 98 individuals who completed the UCLA residency between 1984 and 1989. Questions about the specifics of the type of chief residency completed (if any) and current professional activities were included in the survey. Finally, the former chiefs were asked if the position had significantly helped their careers.

Of the 98 questionnaires mailed, 55% (54) were returned. Of those returned, 65% (35 of 54) came from former chief residents. Of those who completed chief residencies, only 43% (15 of 35) felt the position benefited their careers; 23% (8) felt the chief residency did not help; and 34% (12) were unsure. Having done a chief residency did not appear to influence current professional activities. Of those who had done a chief residency, 71% (25) were currently primarily involved in clinical care; 6% (2) in administration; 11% (4) in research; and 11% (4) did not respond. Of the former residents who had not done a chief residency, 68% (13) were doing clinical care; none were in administration; 26% (5) were in research; and 5% (1) did not respond. Further analysis revealed no differences, regardless of current primary work role, among former chief residents' beliefs that doing a chief residency had significantly affected their careers. Finally, the defined role and type of chief residency (inpatient unit, outpatient service, etc.) did not appear to influence current professional activities.

As a convenience sample of former residents from one training program, our results are not generalizable to all former psychiatric residents. However, this represents the first study to date of former psychiatry chief residents' perceptions about the benefit of a chief residency to their careers. Although this issue has been ignored in previous surveys that have focused on the needs of the institution or junior housestaff, a major purpose of a chief residency is to provide further training and education for the individual. This study raises questions about the educational value to the chief resident of the chief residency experience.

Future studies should examine the questions raised by this pilot work as well as the need for more formal training of psychiatric residents in administration, such as that now given in other medical specialties (3,7). Such research can be used to better prepare psychiatric residents for chief residencies and guide the educational content of these roles.

Martin P. Szuba, M.D.
Barry H. Guze, M.D.
Steven H. Richeimer, M.D.
Department of Psychiatry and
Biobehavioral Science
UCLA School of Medicine
Los Angeles, CA

References
3. Colenda CC: The psychiatry chief resident as information manager. Journal of Medical Education 1986; 61:666-673
5. Commission on Graduate Medical Education: Graduate Medical Education. Chicago, IL, University of Chicago Press, 1940
ACADEMIC PSYCHIATRY

Editor
JONATHAN F. BORUS, M.D.
Boston, Mass.

Deputy Editor
PHILLIP R. SLAVNEY, M.D.
Baltimore, Md.

Book Forum Editor
ALLAN MALTBIE, M.D.
Chapel Hill, N.C.

Abstracts Editor
DORTHEA JUUL, Ph.D.
Deerfield, Ill.

Editorial Board Members
ARNOLD M. COOPER, M.D.
New York, N.Y.

STEFAN STEIN, M.D.
New York, N.Y.

MINA K. DULCAN, M.D.
Atlanta, Ga.

ALAN STOUDEMIRE, M.D.
Atlanta, Ga.

ROBERT E. HALES, M.D.
San Francisco, Calif.

GORDON STRAUSS, M.D.
Los Angeles, Calif.

JERALD KAY, M.D.
Dayton, Ohio

ZEBULON TAINTOR, M.D.
New York, N.Y.

JAMES LOMAX II, M.D.
Houston, Tex.

GARY J. TUCKER, M.D.
Seattle, Wash.

CAROLYN B. ROBINOWITZ, M.D.
Washington, D.C.

SHERWYN M. WOODS, M.D.
Los Angeles, Calif.

STEPHEN C. SCHEIBER, M.D.
Chicago, Ill.

JOEL YAGER, M.D.
Los Angeles, Calif.

WILLIAM H. SLEDGE, M.D.
New Haven, Conn

American Association of Chairmen of Departments of Psychiatry
Association for the Study of Medical Education (United Kingdom)
Association of Directors of Medical Student Education in Psychiatry
Association of University Professors of Psychiatry (United Kingdom)
Coordinators of Psychiatric Education (Canada)
Coordinators of Undergraduate Psychiatric Education (Canada)
Society of Professors of Child Psychiatry

Academic Psychiatry (formerly the Journal of Psychiatric Education) publishes material describing educational efforts for and by psychiatrists as well as articles addressing other issues relevant to the academic missions of departments of psychiatry. The journal provides a forum for work which furthers knowledge in psychiatric education and stimulates improvements in academic psychiatry.

Officers

American Association of Directors of Psychiatric Residency Training
President
ALLAN TASMAN, M.D.
Louisville, Ky.

President-Elect
JAMES W. LOMAX II, M.D.
Houston, Tex.

Secretary
KAILIE SHAW, M.D.
Tampa, Fl.

Treasurer
ELIZABETH B. WELLER, M.D.
Columbus, Ohio

Executive Secretary
DAVID A. GOLDBERG, M.D.
Hartford, Conn.

Association for Academic Psychiatry
President
ALLAN TASMAN, M.D.
Louisville, Ky.

President-Elect
CAROLYN ROBINOWITZ, M.D.
Washington, D.C.

Secretary
DONALD FIDLER, M.D.
Morgantown, W. Va.

Treasurer
ELLEN LEIBENLUFT, M.D.
Bethesda, Md.

Executive Secretary
DON R. LIPSITT, M.D.
Cambridge, Mass.
Journal Policy
Advisory Committee

CAROL C. NADELSON, M.D.
Editor-in-Chief

JONATHAN F. BORUS, M.D.
Editor
Academic Psychiatry

GENE D. COHEN, M.D., PH.D.
Editor
The American Journal of Geriatric Psychiatry

SHERVERT H. FRAZIER, M.D.
JERALD KAY, M.D.
Editor
The Journal of Psychotherapy Practice and Research

SHELTON L. MILLER, M.D.
Editor
The American Journal on Addictions

ROBERT O. PASNIAU, M.D.
THOMAS N. WISE, M.D.
Editor-in-Chief
Psychosomatics

STUART C. YUDOFSKY, M.D.
Editor
The Journal of Neuropsychiatry and Clinical Neurosciences

Board of Directors

MELVIN SABSHIN, M.D.
President and
Chairman of the Board

ELISSA P. BENEDIK, M.D.

DOYLE L. CARSON, M.D.

LAWRENCE HARTMANN, M.D.

RALPH A. O'CONNELL, M.D.

ROBERT O. PASNIAU, M.D.

JOHN A. TALBOT, M.D.

Ex Officio

CAROL C. NADELSON, M.D.
Editor-in-Chief

RONALD E. McMILLEN
General Manager

SHERVERT H. FRAZIER, M.D.
Founder Consultant

American Psychiatric Press, Inc.
Journals Division

JOHN MCDUFFIE
Managing Editor

CHRISTOPHER GREEENE
Assistant Editor

SOL ELENA MORALES
Editorial Assistant

CLAIRE REINBURG
Editorial Director

JANE HOOVER DAVENPORT
Electronic Prepress Director

JOANIE LEFKOWITZ
Electronic Prepress Manager

RICHARD BARDES
Business Manager

BETH PRESTER
Circulation Manager

JACQUELINE COLEMAN YOUNG
Fulfillment Manager

JON O. JENSEN
Director of Marketing

MARK BLOOM
Advertising and Marketing Manager


Second class postage paid at Washington, DC, and additional mailing offices.

Manuscript submissions may be sent in quadruplicate to Jonathan F. Borus, M.D., Editor, Academic Psychiatry, American Psychiatric Press Inc., 1400 K Street, N.W., Washington, DC 20005. Consult the "Information for Contributors" for more details.

Subscriptions are U.S. $85 a year (4 issues); $135 institutions; $42.50 students/residents. Foreign subscriptions are $100 a year individually; $150 institutions. Single issues are U.S. $35; foreign $40. All single issue orders must include prepaid. For information on subscriptions, single issues, address changes, and adjustments, telephone (202) 682-6240 or write to Academic Psychiatry, American Psychiatric Press, Inc., 1400 K Street, N.W., Washington, DC 20005.

Members of the following organizations receive Academic Psychiatry as a perquisite of membership: the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry. Members of the Corresponding Member Organizations (see list on previous page) are entitled to a 20% discount on subscriptions through membership in their organization.


American Psychiatric Press, Inc., the American Association of Directors of Psychiatric Residency Training, the Association for Academic Psychiatry, and the Corresponding Member Organizations do not hold themselves responsible for statements made in this publication by contributors or advertisers. Unless stated, material in Academic Psychiatry does not reflect the endorsement, official attitude, or position of the American Psychiatric Press, Inc., the American Association of Directors of Psychiatric Residency Training, the Association for Academic Psychiatry, or the Corresponding Member Organizations.

Academic Psychiatry is abstracted or indexed in Psychological Abstracts, Excerpta Medica, Chicago Psychodynamic Literature, Social Sciences Citation Index, Current Contents/Social and Behavioral Sciences, Automatic Subject Citation Index, Abstracts Research Pastoral Care, Current Opinion in Psychiatry, and Information Updates.
Information for Contributors

The American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry have joined together to sponsor Academic Psychiatry, a peer-reviewed quarterly journal published by American Psychiatric Press, Inc. Formerly the Journal of Psychiatric Education, Academic Psychiatry is dedicated to the publication of work concerning educational efforts by and for psychiatrists, and articles addressing teaching, research, administrative, clinical, organizational, and economic issues relevant to the academic missions of departments of psychiatry. The Editors invite high-quality submissions that further knowledge in psychiatric education and stimulate improvements in academic psychiatry.

Peer Review: All submissions are reviewed by at least two experts to determine the originality, validity, and importance to the field of their content and conclusions. Reviewers of a manuscript will be blind to the authors' identity, and authors will be sent reviewer comments that are judged to be useful to them. Academic Psychiatry has initiated a rapid review procedure, and authors can expect to receive notification of the Editor's decision regarding their submission within three months of receipt of the submission by the journal office. To foster rapid publication, any required revisions are expected to be accomplished by the authors within an additional two-month period.

Manuscript Specifications: Manuscripts must be prepared according to the manuscript specifications of The American Journal of Psychiatry. All manuscripts will be edited for clarity, conciseness, and conformity to journal style.

Original Articles: Original reports of empirical research or critical analyses of important topics in psychiatric education or academic psychiatry may be submitted in one of the following formats. Special Articles are overview articles that bring together important information on a topic of general interest to academic psychiatrists. Authors who wish to write a Special Article are advised to check with the Editor to ensure that a similar work has not already been submitted or invited. Special Articles may not exceed 6,250 words (25 double-spaced pages), including tables, figures, an abstract of no more than 100 words, and no more than 100 references. Regular Articles may not exceed 3,750 words (15 double-spaced pages), including references, tables, figures, and an abstract of no more than 100 words. For all articles, a table or figure that fills one-half of a vertical manuscript page equals 100 words of text; one that fills one-half of a horizontal page equals 150 words of text.

New Ideas: This section includes descriptions of innovative programs, curriculums, teaching strategies, techniques, and technologies worthy of broad dissemination to the field. Generally, the programs being described should have been implemented, and some form of evaluation should be reported. Submissions for the New Ideas section are limited to 3,750 words (15 double-spaced pages).

Commentary: Submissions for the Commentary section should be tightly reasoned opinion pieces not exceeding 3,750 words (15 double-spaced pages) that address an important issue in psychiatric education or academic psychiatry.

Other Communications: Brief letters will be considered if they include the notation "for publication." Editorial and pertinent notices and official actions of the sponsoring organizations will also be published.

Submission Procedure: The original typescript, three copies, and a cover letter specifying the section of the journal for which the submission is intended should be submitted to Jonathan F. Borus, M.D., Editor, at the address at left. Upon acceptance of an article, the author(s) will be required to assign copyright ownership in writing to Academic Psychiatry. All inquiries should be directed by mail to the address at left.