# Educating Family Physicians To Care for the Chronically Mentally Ill

L. Ralph Jones, MD, and Harry J. Knopke, PhD Augusta, Georgia, and Tuscaloosa, Alabama

More than 50 percent of the chronically mentally ill receive their medical, psychiatric, and social support services from primary care physicians in the general health sector. Despite this high level of involvement with these patients, the majority of family physicians consider their training in the management of patients with mental disorders to be inadequate. This paper describes six categories of critical competencies that should be included in the mental health curricula of family physician training programs: therapeutic attitudes and skills, diagnosis and differential diagnosis, functional assessment, psychopharmacology, management of emergencies, and psychosocial treatments. It outlines the manner in which specific competencies could be incorporated in medical school, in family practice residency training, and in postgraduate continuing medical education as well as the specific elements included in each. The discussion is based on the assumption that more effective participation by family physicians in the treatment of chronic psychiatric illness requires active attention throughout the continuum of medical education.

The chronically mentally ill obtain about one half of their medical, psychiatric, and social support services in the general medical sector from primary care physicians. 1-4 This circumstance is a function of the failure to develop viable alternatives to institutional care, the inadequacy of mental health services in many settings, and the location of the majority of chronic mental patients in nursing homes, various nontraditional institutions in the community, or with their families. In these settings primary care physicians may be the only caregivers, or the patient and his or her family may wish to obtain medical and psychiatric care from these physicians.

Family physicians, especially those who practice in underserved areas, often reluctantly provide general medical care for the chronically mentally ill while at the same time finding themselves managing psychotropic medication, monitoring subsequent progress, and dealing with patient and family adjustments in crises. Yet the majority consider their training in the management of patients with mental disorders to be inadequate.<sup>5</sup> Although training for

the special skills required by psychiatrists to treat these patients has been described, 6-10 there is a striking paucity of experience and literature to guide family practice, psychiatry, and other faculty in residency programs in the preparation of family physicians to care for chronic mental patients. 11,12

To provide a basis for addressing this inadequacy, this article describes six categories of critical competencies that should be included in the mental health curricula of family physician training programs. It presents an outline of the manner in which these competencies could be incorporated in medical school, in family practice residency training, and in postgraduate continuing medical education. It also summarizes the clinical knowledge, attitude, and skill objectives that contribute to each competency. The article is based on the assumption that the realization of more effective participation by family physicians in the treatment of chronic psychiatric illness requires coordinated, concerted efforts throughout the continuum of medical education.

Submitted, revised, October 1, 1986.

From the Department of Psychiatry, Medical College of Georgia, Augusta, Georgia, and the Department of Behavioral Science, College of Community Health Sciences, The University of Alabama, Tuscaloosa, Alabama. Requests for reprints should be addressed to Dr. Harry J. Knopke, The University of Alabama, PO Box B, Tuscaloosa, AL 35487-1498

#### CRITICAL COMPETENCIES

The chronically mentally ill population includes individuals with schizophrenia, bipolar disorder, alcoholism and

1987 Appleton & Lange

other drug addictions, organic brain syndromes, mental retardation, and certain personality disorders. Patients vary according to age, chronicity, previous treatment history, and associated physical or mental disability. Because patients with schizophrenia constitute a majority of the most severely disabled, their management is used in this paper to illustrate approaches to caring for the chronically mentally ill. Each critical competency contributes knowledge, skill, or attitudinal elements that constitute a particular professional role, <sup>13</sup> in this case the mental health role of family physicians. The curriculum can be included in newly established family practice education programs or in those revised to address chronic mental illness.

The critical competencies involved in the care of the chronically mentally ill can be grouped into six categories: therapeutic attitudes and skills, diagnosis and differential diagnosis, functional assessment, psychopharmacology, management of emergencies, and psychosocial treatments. These competencies should be addressed at each stage of the medical education process. The manner and the extent to which they are emphasized will vary and will reflect the student-physician's increasing involvement in the care of individual patients. The six categories of competencies are summarized in Table 1 as they may be included in the educational programs of medical students, family practice residents, and practicing family physicians engaged in continuing medical education. The knowledge, skill, and attitude elements in each competency area build on one another through each stage, and from one stage to the next, directed toward effective participation by these physicians in the treatment of the chronically mentally ill.

## Therapeutic Attitudes and Skills

The most significant obstacles to the effective management of the chronically mentally ill are the prevailing negative attitudes and beliefs about them. The etiology of schizophrenia, for example, remains unknown, and there is no definitive treatment. By extension, there is a widespread perception that the chronically mentally ill are untreatable. Yet there has been considerable progress in the design of acute care treatments and rehabilitation programs. Unfortunately, though demonstrably effective pilot programs exist for these patients, they are not readily accessible for inclusion in the training of family physicians.

Unquestionably the most beneficial learning experience for therapeutic understanding by physicians of such patients is through sustained exposure to their care during medical school and residency training. In this context, physicians in training may learn to maintain realistic expectations regarding treatment and prognosis of the chronically mentally ill and to formulate treatment goals in such a way as to recognize meaningful gains toward

rehabilitation rather than curative treatment. The family physician's efforts may be viewed as part of a long-term systems approach to maintaining optimal patient functioning. 10,14

The therapeutic attitudes and skills acquired in training will ultimately be expressed in the physician-patient relationship, an essential component of the care of chronically mentally ill patients. Physicians should anticipate providing a reliable and stable basis of support and advice that may otherwise be lacking. Thus, the focus of psychotherapeutic interventions should be on practical issues of adaptation in the present or future, as is illustrated in the following case summary:

#### **CLINICAL CASE SUMMARY**

J.M. is a 62-year-old man who lives alone and receives medical care from a physician in his home town. He has a fair relationship with his brother, whom he visits about once a month, and his niece helps him occasionally to keep appointments and shop. He has no other sources for assistance or support.

He has a long history of paranoid schizophrenia and hypertension. For the past two years he has suffered recurrent episodes of congestive heart failure, which have necessitated his hospitalization. He believes he was poisoned with rat poison at the onset of symptoms of congestive heart failure and has never accepted the idea of having heart disease. Neither will he comply with dietary instructions or medications. His conditions are managed with hydralazine, 35 mg every six hours; digoxin, 0.25 mg/d; furosemide (Lasix), 40 mg/d; captopril, 50 mg three times a day; and fluphenazine (Prolixin), 25 mg intramuscularly every month. He is not compliant to these medications, however, and he denies having symptoms referable to heart disease when obviously in respiratory distress.

His physician has worked out a plan for him to be visited twice each week by his niece; she checks on his medication compliance and reminds him about his hypertension and to comply with treatment. He is followed clinically once every month, combining a fluphenazine injection and blood pressure check with a brief supportive follow-up visit with his physician. His psychiatric state is reviewed approximately quarterly by a psychiatrist in a satellite mental health center clinic.

As part of his management, after numerous hospitalizations, his physician instituted proceedings for commitment to a state hospital to allow him to receive needed medical and psychiatric care. The physician maintained contact with the patient and his attending physicians in the state hospital so that, upon his subsequent discharge, there was no interruption in the continuity of care provided.

Table 2 describes the learning goals that contribute to the competencies involving therapeutic attitudes and skills

TABLE 1. COMPETENCIES FOR CARING FOR THE CHRONICALLY MENTALLY ILL: RELATIVE EMPHASES AT EACH STAGE OF THE MEDICAL EDUCATION PROCESS

Categories of Competencies	Stages		
	Medical Student	Family Practice Resident	Practicing Physician Engaged in Continuing Medical Education
Therapeutic attitudes and skills	Establish a therapeutic atti- tude toward care of the chronically mentally ill by learning about special fea- tures of this population Understand the functions of the members of a mental health team	Develop further a therapeutic attitude toward and accept the chronicity of one's patients' illnesses  Provide care for a small number of chronic patients for at least 6 months including participation as a member of a network of community support services	Refine or revitalize as necessary a therapeutic attitude toward one's patients with chronic mental illness Establish procedures to collaborate with area community support systems
Diagnosis and differential diagnosis	Know the elements of the psy- chiatric data-gathering pro- cess  Understand the operational cri- teria for psychiatric and dif- ferential diagnoses	Establish accurate differential diagnoses; be able to identify coexistent medical illnesses that cause or exacerbate mental symptoms	Refine diagnostic skills to recognize previously undiagnosed medical ill- nesses in chronically mentally ill patients in one's practice
Functional assessment	Conduct supervised interviews of chronically mentally ill patients; know the assessment procedures for the level of functional disability	Evaluate accurately symp- tomatology and level of adaptive functioning of one's chronically mentally ill patients	Assist patient participation in psychosocial rehabili- tation programs or mental health center programs
Psychopharmacology	Know indications, expectations, and important side effects of antipsychotic medications  Learn elements of acute treatment, rapid tranquilization, and maintenance therapy	Include appropriate monitor- ing of psychopharmacol- ogical effects, acute and long-term side effects, and compliance in each pa- tient's treatment plan	Update psychopharmacol- ogic management skills including acute psy- chotic states, mainte- nance neuroleptic medi- cation, long-term side effects, and informed consent
Management of emer- gencies	Know the principles of treat- ment employed in a psychi-	Manage psychiatric emer- gencies appropriately	Manage psychiatric emergencies appropriately
	atric emergency	Know laws governing com- mitment and competency	Review laws governing commitment and competency
Psychosocial treatments	Conduct educational and sup- portive sessions with fami- lies	Incorporate psychotherapeu- tic work with family mem- bers as part of treatment plans	Incorporate psychothera- peutic work with family members as part of treatment plans

that should be obtained in the continuum of medical education.

# **Diagnosis and Differential Diagnosis**

Developing and maintaining skill in diagnosis and differential diagnosis are the most important educational goals for students, residents, and physicians caring for this patient group. Operational criteria for diagnosis of schizo-

phrenia have been formulated in the Diagnostic and Statistical Manual of Mental Disorders, ed 3 (DSM-III). 15

The management of patients rigorously diagnosed as schizophrenic is complex, but a large percentage of the chronically mentally ill population suffers additionally from coexistent, frequently undiagnosed medical illness that may cause or exacerbate mental symptoms. Approximately 50 percent of outpatients and inpatients studied have been found to have significant previously undi-

Categories of Competencies	Goals
Therapeutic attitudes and skills	Identify the processes and the content of the demonstrably effective treatment programs that have been developed
	<ol><li>Establish a positive approach to patients that disallows blaming the disabled mental patient or the family for persistent disability or presuming noncompliance with treatment as a basis for disability</li></ol>
	3. Utilize a systems approach to patient care that is consistent with the biopsychosocial model 4. Formulate treatment goals that recognize meaningful gains toward rehabilitation rather than create unreasonably high or low expectations of treatment
	<ol> <li>Establish a helpful, kind, but formal physician-patient relationship that constitutes a reliable resource for support and advice</li> </ol>
	<ol><li>Develop treatment plans that avoid intense, frequent contact, or probing of psychodynamics, focusing interventions on practical issues in the present and future</li></ol>
	<ol><li>Through the physician-patient relationship help the patient achieve moderate improvement in self- esteem, in mastery over environmental circumstances, and in control over internal drives</li></ol>
	<ol><li>Help the patient gain the insight that he or she has a mental disorder, that symptoms may occur in stressful situations, and that antipsychotic medications relieve psychotic symptoms</li></ol>
Diagnosis and differential diagnosis	<ol> <li>Utilize DSM-III criteria for diagnosis of chronic mental disorders</li> <li>Develop a heightened awareness of the 10% of outpatients and 40% to 50% of psychiatric inpatients who may have unrecognized medical causes for their emotional symptoms that may cause or may be exacerbating a preexisting mental disorder</li> </ol>
Functional assessment	<ol> <li>Determine disability level in planning treatment and rehabilitation by (1) assessing symptom level, (2) evaluating interpersonal functioning or social skills, and (3) identifying any occupational dysfunction</li> </ol>
	<ul><li>2. Distinguish among the factors influencing disability level in specific patients</li><li>3. Plan rehabilitation programs on the basis of accurate assessments of outcome criteria related to separate systems of functioning</li></ul>
Management of emergencies in the chronically mentally ill	<ol> <li>Recognize that violent behavior or the threat of violence often precedes emergency evaluation</li> <li>Consider, during emergency psychiatric evaluation, unrecognized medical illness, substance abuse, and homicidal or suicidal ideation as possible management issues</li> </ol>
	<ul> <li>3. Know indication and procedures in the application of restraints</li> <li>4. Be able to stabilize emergent situations through use of psychotherapy and pharmacology while awaiting available psychiatric consultation or referral</li> </ul>
	Establish familiarity with state laws governing commitment and competency     Know the extent of professional liability
Psychopharmacology	<ol> <li>Differentiate efficacy of antipsychotic drugs against positive symptoms (ie, delusions, hallucinations, agitation, excitement) from their less effective use against the negative symptoms of apathy and social withdrawal</li> </ol>
	<ol> <li>Understand that one antipsychotic drug is not superior to another, but side-effect profiles and pas patient or patient family response may be predictive</li> </ol>
	Know how to apply appropriate treatment principles in using at least two antipsychotic medications. Be able to distinguish need for antipsychotic agents from that of antidepressants
	<ol> <li>Understand that rapid tranquilization may be required to manage severely symptomatic, psychotic patients in isolated or understaffed settings</li> </ol>
	<ol><li>Understand the principles of maintenance neuroleptic therapy, including relapse prevention and early recognition and monitoring for tardive dyskinesia</li></ol>
	<ul><li>6. Be prepared to manage acute side effects of neuroleptics</li><li>7. Utilize neuroleptic treatment approaches that are likely to improve compliance</li></ul>
Psychosocial treatments	<ol> <li>Identify the availability and the means to establish linkage with psychosocial rehabilitation pro- grams for chronically disabled patients</li> </ol>
	<ol><li>Distinguish the potential for both positive response and relapse in patients from high-expressed- emotion families and those from families evidencing supportive, problem-solving, and calming characteristics</li></ol>
	3. Employ appropriate psychoeducational interventions in the care of specific patients and families 4. Utilize local community support, education, and treatment resources as parts of overall management strategies for chronically mentally ill patients and their families

agnosed medical illness.<sup>16</sup> These patients communicate symptoms poorly. Autistic preoccupation, delusional misinterpretation, agitation, or assaultiveness may mask

underlying medical illness and complicate diagnostic evaluation. Untoward effects of psychotropic medications are significant variables in the process of diagnosis. A

high index of suspicion of physical disease is therefore necessary, especially when the patient is seen in the emergency room or when a patient's treatment plan is not working. 17,18

The following case summary illustrates these issues, underscoring the importance of an openness to the possibility that medical illness may cause symptoms initially thought to be from psychiatric illness:

# CLINICAL CASE SUMMARY

P.G. is a 53-year-old woman with chronic schizophrenia who has lived for four years in a residential care home as part of a community-based care plan. Except for quarterly follow-up visits to a mental health center clinic, she received all her health care from her family physician, who is also caring for some of the other residents of the home. She has functioned fairly well, although she is often preoccupied with grandiose fantasies.

After a period of rather stable functioning, Ms. G. was observed to begin rather abruptly rocking forcefully in her chair. She looked very anxious and was thought to be hyperventilating. She was brought by the supervisor to the emergency room, where she was found to have diffuse pulmonary rales, tachycardia, and hepatomegaly consistent with congestive heart failure. Prior to this event, she had no complaints of physical symptoms. Astute diagnosis and management by the family physician averted planned transfer to the state psychiatric hospital.

Table 2 summarizes the elements involved in the competencies related to diagnosis and differential diagnosis.

#### **Functional Assessment and Rehabilitation Planning**

In chronic mental illness, disability may be evaluated based on symptoms, social relations dysfunction, and occupational dysfunction. Rehabilitation planning, in turn, requires accurate functional assessment of separate systems of functioning, recognizing that the best predictor of future performance in a given area is past performance in the same area. Active pursuit of the goals contained in Table 2 should enable the developing physician to organize modest, short-term goals into an individualized treatment or rehabilitation plan. This approach takes into account the complex way that biological, psychological, and social factors interact to determine psychopathology. 19-21

# **Management of Emergencies**

Fifteen to 20 percent of chronically mentally ill patients require some form of crisis intervention each month and about 5 to 10 percent will need emergency hospitalization.<sup>22</sup> Knowledge of diagnosis and differential diagnosis is even more important in an emergency situation. Un-

recognized medical illness frequently causes mental symptoms or exaggerates symptoms of preexisting mental disorders. At times, psychiatric emergencies appear to be medical in etiology.

Violent behavior or the threat of violence is often the reason for appearance in an emergency room or outpatient clinic. In addition to being able to establish a differential diagnosis to distinguish among medical disorders, drug abuse, and psychiatric conditions that may result in violent behavior, the physician must be able to apply restraints judiciously to protect the patient and staff from injury.

Perhaps the most important resource in a psychiatric emergency is access to psychiatric consultation or referral. Generally, if available, referral should be arranged for all psychiatric patients who cannot be stabilized either by reliance on the physician-patient relationship or by psychotropic medication after discussions with a psychiatric consultant.

Physicians should also know the extent of their liability. Usually physicians will not be held liable for the consequences of their diagnosis and treatment if they have exercised the required degree of skill and care. On the other hand, they may be found liable for not intervening and placing the patient under control in a hospital setting. Table 2 presents the goals for developing competency in the management of emergencies in the chronically mentally ill.

#### **Psychopharmacology**

The cornerstone in the treatment of most chronically mentally ill patients is the use of antipsychotic drugs. Their efficacy is proven in combating the "positive" symptoms of psychosis: delusions, hallucinations, and agitation or excitement.<sup>24</sup> Physicians should be aware that the approach to treatment depends upon the status of the patient. A working knowledge of at least two or three pharmacologically different antipsychotic agents is essential. Table 2 presents a series of goals that may be used to guide the development of professional competency in psychopharmacology.

Teaching programs should also stress that, despite the utility of antipsychotic drugs for some symptoms in schizophrenia, the most common outcome for 40 percent of schizophrenic patients is a nonpsychotic deficit state characterized by blunted affect and apathy and resulting in a lack of goal-directed behavior and a profound asociality. These aspects are the most disabling results of schizophrenia, and they are not responsive to antipsychotic medication. Psychosocial treatments may constitute the best approach for the deficit state, though progress in their design, implementation, and evaluation has lagged far behind progress in psychopharmacology.

# **Psychosocial Treatments**

Families have become the real primary caregivers for a large population of the long-term mentally ill as deinstitutionalization policies have advanced. Teaching programs should provide experiences to demonstrate that a straightforward way to improve family management of a mentally ill family member is to provide educational and supportive interventions, and that if elements of a community support program, such as day treatment, are available, the family should be educated to derive the most benefit from the program. These experiences should include subsequent family sessions devoted to reducing family tensions and improving problem-solving skills.

Physicians should also learn that the treatment of every mentally ill patient should include teaching the family and patient to recognize early signs of decompensation and planning steps to ensure the initiation of prompt and effective treatment. Table 2 describes a number of goals addressing the incorporation of psychosocial treatment in the care of the chronically mentally ill.

The following case summary illustrates several issues associated with emergencies, psychopharmacology, and psychosocial treatments that may confront a family physician caring for a patient with chronic mental illness:

# CLINICAL CASE SUMMARY

J.W. is a 34-year-old man who was able to function marginally well while living with his family following discharge from a state hospital, where his condition was diagnosed as schizophrenia. Unfortunately he refused to keep aftercare appointments, and his parents requested assistance from their family physician. Psychiatric consultation services were available, but suitable referral could not be arranged because of the travel involved. With the backup of the consultants, the patient was treated by the family physician for a number of months, utilizing monthly follow-up appointments and more intensive involvement during exacerbation.

In an interval during which the patient refused to take his antipsychotic medication, he was observed by his family to undergo distinct changes in emotional status and self-care over the course of four days. He had very restless sleep and remained in his room. He began hitting the bedroom wall with his fist, talking to himself, and dressing in a bizarre manner.

After emergency evaluation and management, which included administration of neuroleptics and the application of restraints in the emergency room, the family physician worked with the family to make arrangements for rehospitalization. Following stabilization there, the patient was discharged again to his family; an aftercare plan included the family physician as a major provider of mental health care. This time, the family and their

physician discussed the early signs of decompensation, and plans were made for prompt psychopharmacologic intervention should decompensation occur. Also, because of the patient's history of noncompliance, long-acting injectable antipsychotic medication was used, obtained every three weeks at the office of the family physician. At these times, reevaluation and supportive therapy were provided. The combined, active involvement of the family and physician in the care of this patient resulted in a more stable clinical course.

#### BURNOUT

As these objectives are used by program directors and faculty to develop and maintain a coordinated mental health curriculum through the stages of the medical education process, they should also prove helpful for addressing the potential for burnout. Burnout is a distinct risk for all professionals who work with the chronically mentally ill. This syndrome, characterized by physical and emotional exhaustion in the context of overwork, may result in a negative attitude about professional commitments, a loss of feeling and concern for patients, and an insult to self-esteem. Mental health professionals' satisfaction with their work has been reported to be inversely correlated with the number of chronically mentally ill patients for whom they care.<sup>27</sup>

If the family physician's practice characteristics are attractive and fulfilling in other ways, limited work with chronically mentally ill patients may be gratifying to the physician and to patients and their families. The key to successful intervention is to utilize approaches that maintain optimal involvement without risk of becoming burned out. Such approaches are implicit in the competencies listed and include sharing the care of the chronically mentally ill patient with other professionals, maintaining objectivity about patients, turning to other professionals for advice and emotional support, and being sensitive to early signs of fatigue or frustration. Physicians should adjust their participation in the care of such patients to accommodate their own needs for satisfaction in medical practice. To focus only on the extensive needs of patients can be self-defeating for the physician and for patients and may contribute to processes leading to refusal to provide needed services for these patients.

# CONCLUSIONS

The chronically mentally ill have needs for medical and psychiatric care that are expressed in the general health care sector as often or more often than in the specialty

mental health sector. Family physicians serving these patients often lack the necessary therapeutic attitudes and skills to provide adequate care and to participate in a system of community-based treatment and support services appropriate for patient needs.

The logic to provide educational interventions to improve delivery of care to chronically mentally ill patients seems unassailable. Yet serious obstacles stand in the way of straightforward implementation in medical education programs. Unified services for community-based care of chronic patients are few, and the pervasive underfunding of community programs results commonly in the inability to attract or retain professionals who would be good role models. This condition also perpetuates poor care and limits severely the number of appropriate settings available for training programs. The most important obstacles, however, are the prevailing negative attitudes of educators about chronic care.

The sequence of medical education described in this paper has been designed to address these shortcomings. The training approach is straightforward, comprehensive, and competency based; at the same time, it is realistically limited in scope and based on the importance of avoiding professional burnout in relation to the needs of these patients for long-term support and intermittent crisis intervention.

Enhancement of the role of family physicians in the care of the chronically mentally ill can be only one building block in the structure of community-based services. This contribution to medical, pharmacologic, and psychosocial treatments, nevertheless, can be important in reversing the long-term neglect of these patients.

## References

- Jones LR, Badger LW, Coggins DR, Knopke HJ: The emerging role of the primary care physician in the care of the chronically mentally ill. J Public Health Policy 1983; 4:467–483
- Goldberg ID, Babigian HM, Locke BZ, Rosen BM: Role of nonpsychiatrist physicians in the delivery of mental health services. Public Health Rep 1978; 93:240–245
- Regier DA, Goldberg ID, Taube CA: The defacto US mental health services system: A public health perspective. Arch Gen Psychiatry 1978; 35:685–693
- Talbott J: The emerging crisis in chronic care. Hosp Community Psychiatry 1981; 32:447
- McCranie EW, Hornsby L, Calvert JC: Practice and career satisfaction among residency trained family physicians: A national survey. J Fam Pract 1982; 14:1107–1114

- Talbott J (ed): The Chronic Mental Patient: Problems, Solutions and Recommendations for a Public Policy. Washington, DC, American Psychiatric Association, 1978
- Cutler DL, Bloom JD, Shore JH: Training psychiatrists to work with community support systems for chronically ill persons. Am J Psychiatry 1981; 138:99–101
- Neilsen AC, Stein LI, Talbott JA: Encouraging psychiatrists to work with chronic patients: Opportunities and limitations of residency education. Hosp Community Psychiatry 1982; 32:767– 775
- Schwartz S, Krieger M, Sorensen J: Preliminary survey of therapists who work with chronic patients: Implications for training. Hosp Community Psychiatry 1981; 32:799–800
- White HS, Bennett MB: Training psychiatric residents in chronic care. Hosp Community Psychiatry 1981; 32:339–343
- Talbott J: Guidelines for primary physicians who treat chronic mental patients. Drug Ther, February 1983, pp 85–93
- Talbott J: Medical education and the chronic mentally ill. J Natl Assoc Private Psychiatric Hosp 1980; 11(fall):58–62
- Knopke HJ: A framework for systematic educational planning. In Knopke HJ, Diekelman NJ (eds). Approaches to Teaching Primary Health Care. St. Louis, CV Mosby, 1981
- Stern R, Minkoff K: Paradoxes in programming for chronic patients in a community clinic. Hosp Community Psychiatry 1979; 30:613– 617
- Diagnostic and Statistical Manual of Mental Disorders, ed 3. Washington, DC, American Psychiatric Association, 1980
- Hall RCW, Gardner ER, Stickney SK, et al: Physician illness manifesting as psychiatric disease: Analysis of a state hospital population. Arch Gen Psychiatry 1980; 37:989–995
- Bunce DFM, Jones LR, Badger LW: Medical illness in psychiatric patients. South Med J 1982; 75:941–944
- Koranyi EK: Morbidity and rate of undiagnosed physical illness in a psychiatric clinic population. Arch Gen Psychiatry 1979; 36: 414–417
- Minkoff K: A map of the chronic mental patient. In Talbott J: The Chronic Mental Patient. Washington, DC, American Psychiatric Association, 1978, pp 11–39
- Strauss JS: Chronicity: Causes, prevention and treatment. Psychiatry Ann 1980; 10:23–29
- Strauss JS, Carpenter WT: Prediction of outcome in schizophrenia:
   III. Five-year outcome and its predictors. Arch Gen Psychiatry 1977; 34:159–163
- Tessler RC, Bernstein AG, Rosen BM, et al: The chronically mentally ill in community support systems. Hosp Community Psychiatry 1982; 33:208–211
- Tancredi LR: Emergency psychiatry and crisis intervention; some legal and ethical issues. Psychiatry Ann 1982; 12:799–806
- Davis JM: Antipsychotic drugs. In Kaplan HI, Freedman AM, Sadock BJ (eds): Comprehensive Textbook of Psychiatry, ed 3. Baltimore, William & Wilkins, 1980
- Huber G, Gross G, Schuttler R, et al: Longitudinal studies of schizophrenic patients. Schizophr Bull 1980; 6:592–605
- Lamb HR: Families: Practical help replaces blame. Hosp Community Psychiatry 1983; 34:893
- Pines AL, Maslach C: Characteristics of staff burnout in mental health settings. Hosp Community Psychiatry 1978; 29:233–237