Mental Disorders in Primary Care Services: An Update

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Synopsis

Frank mental disorders, such as depression and panic disorder, are prevalent in primary care; they cause people substantial suffering and interfere with daily functioning. Even subthreshold or "subsyndromal" conditions, with fewer symptoms than necessary for making a diagnosis, cause substantial morbidity. Recent literature on mental disorders in primary care, where many, if not most, people with mental health problems are seen, is reviewed with focus on recognition and diagnosis issues, management of these problems in primary care, obstacles to accurate diagnosis and appropriate treatment, and prevention issues.

In addition to a review of recent research, there is an effort to place these topics in the context of various directives, including research and Federal documents, that have direct implications for better treatment in primary care of people with mental disorders (for example, practice guidelines). Mental health problems and disorders seen in primary care are a public health problem meriting immediate attention and substantial work at many levels—clinical, educational, organizational, and budgetary.

LARGE EPIDEMIOLOGIC SURVEYS have demonstrated that among those people who currently suffer from mental disorders and seek health care, more than half are treated in the general health care sector, usually in primary care, and they do not see a mental health specialist (*1,2*). General medical providers face many problems in understanding and treating some mental disorders, consequently leaving mental disorders in many people unrecognized or inadequately treated. Furthermore, the inextricable links between mental health, overall functioning (role, social, occupational, and general health) and use of health care are becoming clearer—that is, that poor mental health is connected to poor functioning and possibly inadequate or inappropriate health service utilization. The tremendous suffering caused by mental disorders and the ramifications for health care policy make these issues critically important for scientific investigation.

In the United States since the 1960s, attempts to forge relationships between primary care and mental health services arose from the community mental health center and neighborhood health center movements, and they were given a further emphasis in the 1970s by the President's Commission on Mental Health. In Great Britain, similar attempts gained momentum in the 1970s (*3*). The organization of the delivery of mental health services in primary care can be seen on a continuum from sole provision by primary care clinicians to some linkage with the mental health specialty sector to complete transfer of patient care to that sector. Different models of mental health-primary care linkage have been described, using three main domains: contractual, functional, and educational (*4*). The types of linkages are clearly dependent on the range and types of mental health resources available and the needs of patients with mental disorders. Opportunities for innovative and creative models linking primary care and mental health are limitless, yet underdeveloped. Serious difficulties persist regarding the accurate recognition and appropriate treatment of people with mental disorders in primary care.

This paper will review key features of and current research on mental disorders seen in primary care: the

recognition, diagnosis, and management of mental disorders; the obstacles to diagnosis and treatment; and the improvement of recognition and treatment.

Recognition and Diagnosis Issues

Although mental disorders have been found to be common in primary care settings, all too often they go unrecognized and untreated (*1–5*). In cases of depression, for example, this disorder goes unrecognized in nearly half of all patients in general medical settings (*6–10*), and low rates of treatment are even lower (*11*). After nearly a decade of research in this area, it is clear that the reasons for such low rates of detection and adequate treatment are many and complex. Clinical decision making regarding any disease is a complicated process involving the prevalence and severity of the disease; the patient's characteristics; the physician's attitudes, knowledge, and skills; the characteristics of the setting; and the quality and precision of diagnostic information (*8,9*). Most research on recognition of mental disorders in primary care has centered around screening for a disorder and then providing the physician with psychiatric information through feedback of results obtained from psychiatric screening instruments. Another research approach to recognition has been through education that targets providers' knowledge of psychiatric disorders and treatments.

The screening feedback approach is predicated on the notion that providing busy clinicians with information about an occult disease process will prompt them to work up patients who screen positive and provide appropriate treatment. A series of such studies were conducted in which all eligible patients in a specified clinic were screened (for depression or psychiatric morbidity in general), and those who were positive by screen were randomly assigned to one of two groups: (*a*) provider was informed of screening results or (*b*) provider was not informed of screening results. The basic questions of such studies centered around decisions of physicians: How did they use screening results? Did they recognize and diagnose psychiatric disorders more often? Did they treat psychiatric disorders more often?

Results from these studies have been mixed. Those who used the General Health Questionnaire (GHQ) (*12*), a screen for general psychiatric morbidity, tended to have minimal or nonsignificant differences between groups (*13,14*), whereas studies that used a screen specifically for depression showed statistically significant but modest differences between groups (*15–17*).

A methodologically similar study of alcoholism in primary care showed little difference between the clinician informed versus clinician not informed groups (*18*). Although disappointing, such results are not altogether surprising considering how minimal the intervention was. It would be interesting to know, though, if as many physicians ignored other abnormal results from more medically oriented, commonly used screening tools—such as an EKG.

A further problem with these studies (and screening studies in general) has been that the screening instruments are often nonspecific for psychiatric disorders. The GHQ, for example, is a screen for general psychiatric morbidity (that is, psychological distress), and even the numerous depression screens do not discriminate between the many psychiatric disorders which may have depressive symptomatology (for example, major depression, dysthymia, bipolar disorder, and adjustment disorder with depressed mood).

In an effort to provide a more powerful intervention, Fifer and co-workers of the Technology Assessment Group (*19*) are screening patients for anxiety disorders, and patients screening positive undergo structured diagnostic interviews. Physicians are then randomly assigned to feedback or no feedback conditions. Feedback is intensified and personalized by providing approximately 1 hour of consultation to the physician concerning the first few patients who meet study criteria. Furthermore, the feedback is computer generated to resemble a laboratory report. The results of this study examine a variety of patient and provider outcomes and should be available in the coming year.

Special primary care populations have their own features that make recognition of mental disorders difficult. For example, the situation regarding detection of mental disorders in children and adolescents is even more dismal. Costello and coworkers concluded that less than 5 percent of children seen in pediatric primary care are identified as having an emotional or behavioral problem, and less than half of these are referred to specialty mental health care (*20*).

Detecting mental disorders in the elderly adds further complexity. Multiple medical problems and side effects from polypharmacy or multiple treatments make it even more difficult for primary care providers to sort out mental health symptoms with sufficient clarity to make a psychiatric diagnosis. As with research involving adult subjects, results from screening feedback studies are mixed. In one study, German and coworkers (*14*) found that feedback to physicians of information from the GHQ was effective in increasing physician detection of mental health problems only in patients ages 65 and older—

even though overall detection was higher in younger patients (57.7 percent versus 48.1 percent). Magruder-Habib and colleagues (*11*) found that while feedback of depression screening information made a modest difference in both recognition and treatment rates, the patient's age had no differential effect at all.

Thus, while the screening instruments provide information to the busy clinician, if attended to, they also make more work as the provider must make a differential diagnosis, formulate a treatment plan, and educate the patient so that he or she can understand and accept the diagnosis, and comply with treatment.

Although small increases in rates of detection can be achieved from screening and feedback to providers, it is clear that other factors—most notably structural ones like time and reimbursement—limit the gains that could be attained by this approach. The various obstacles which can influence detection of mental disorders—from patient to provider to setting to system—will be discussed.

Managing Mental Disorders in Primary Care

Primary care physicians' clinical decision-making for and management of patients with mental disorders are clearly dependent on recognition processes and rates. The most studied condition, as noted previously, has been depression (which will serve as a model for this section), but its management by primary care providers has been thought to be disappointing. The major management modalities for depression are pharmacotherapy, psychotherapy, and referral.

Research has demonstrated that even when the diagnosis of depression is made, the dosing and duration of antidepressant treatment by U.S. primary care providers is inadequate (*18,21*), and similar findings were described in the Netherlands (*22*). Pharmacoepidemiology studies also raise concerns about the appropriateness of treatments chosen for depression. For example, minor tranquilizers were used excessively, and 50 percent of people with a coded diagnosis of depression did not receive an antidepressant (*23*).

Finally, a recent study by Katon and coworkers (*24*) demonstrated that, even after a psychiatric consultation intervention with feedback to the primary care physician, only 37.1 percent of depressed patients received adequate doses and duration of antidepressant treatment, a modest improvement over the number of patients evaluated as needing an antidepressant and adequately treated in the year *before* the intervention. Recent preliminary data suggest that newer antidepressants with reported fewer side effects and simpler dosing (for example, fluoxetine) may be prescribed and filled more frequently (*21*). This may change the rates of pharmacotherapy for depression in primary care patients.

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Details about other forms of treatment for depression actually used in primary care are lacking (*25,26*), although studies are underway to assess the feasibility of transferring specialist care of depression to the primary care setting (*27*), as well to evaluate the effectiveness of certain interventions for disadvantaged patients with depression receiving primary care (a National Institute of Mental Health-funded project in progress, J. Miranda, principal investigator). The best studies evaluating all therapies for depression, primarily pharmacotherapy and cognitive-behavioral and interpersonal therapies, have been conducted in the specialty mental health sector and not in the primary care setting.

A recent review of studies of mental health consultation-liaison interventions in primary care concluded that because of methodologic issues, results are encouraging but inconclusive, especially regarding generalizability (*28*). Unique examples include one treatment study comparing individual cognitive therapy, group cognitive therapy, and usual care by a family practitioner for depressed patients in primary care (*29*) and another examining the effect of interpersonal therapy delivered by a nurse practitioner for psychologically distressed patients (*30*). The findings from these studies showed trends toward positive effects on mental health, but methodologic issues limited their generalizability and impact.

Given the fact that more than half of people with mental disorders who use health services use *only* the general medical sector (*1*) and that a large percentage of those who report psychological distress do not receive mental health services even when care is free (*31*), one little-studied major issue is referral of these people from primary care to the specialty mental health sector. A survey of internists and surgeons in

private practice found that while these practitioners estimated that at least 14.6 percent of their patients would benefit from psychiatric treatment, overall only 50 percent of these patients would be referred (*32*). For example, only 37.6 percent of internists would refer depressed patients for ongoing treatment with a psychiatrist, although 67.1 percent would request a consultation. For patients with anxiety attacks, only 40 percent of internists would request a consultation, and only 24.7 percent would refer to a psychiatrist. Jones and colleagues (*33*) found that 24 percent of patients with "moderately severe or severe symptoms of major depression, anxiety disorder, or alcoholism ...were not referred despite ready availability of referral resources."

An additional problem is that some primary care patients refuse to use specialty mental health services, even after being referred by their primary care providers. A recent study indicated that these patients have more medical visits and more difficult to explain somatic problems than patients who did follow through with such a referral (*34*).

Clinical Obstacles to Recognition, Treatment

Classification of mental disorders in primary care. For a number of years, some primary care physicians have claimed that their patients who suffer from depression are different from patients seen in traditional mental health settings (*35,36*). The issue has been clouded by the low rates of recognition of mental disorder in primary care, the lack of controlled treatment trials, and the fact that primary care providers typically ignore traditional psychiatric diagnostic criteria (that is, Diagnostic and Statistical Manual of Mental Disorders, Third Edition) and apply their own (sometimes individualized) conceptual frameworks.

Nevertheless, two recent studies have pointed out that patients in general medical care with depressive symptoms (in the absence of a depressive disorder) have significant associated morbidity relative to those with no symptoms (*10,37*). The morbidity includes days in bed with depressive symptoms, days lost from work, problems with physical and social functioning, and perceived current health and bodily pain. These findings suggest that there may indeed be some merit to modifying psychiatric diagnostic criteria to include a new classification of "minor depression" or "subsyndromal depression," and current research is underway to establish the natural history of "minor depression" in a primary care setting.

If working criteria for subsyndromal diagnoses can be established, then clinical trials can be initiated, with emphasis on nonpharmacologic approaches and comparative antidepressant dosing, including levels considered by psychiatric treatment standards to be subtherapeutic for major depression.

Another oft-discussed syndrome and one that is commonly reported in primary care is that of "mixed anxiety-depression" (*35*). In this condition people have both anxiety and depressive symptoms, but not in sufficient quantity to make a diagnosis of either anxiety or depression. The importance, again, is that these conditions may significantly impair functioning. More research is needed to delimit mixed anxiety-depression from evolving or remitting formerly full blown depression or anxiety disorder.

Other clinical issues, in addition to subsyndromal states, that affect the appropriate diagnosis and management of people with mental disorders is what brings patients to the general medical setting. Primary care visits are most often generated by physical symptom complaints that frequently have no etiology. In a description of distressed high utilizers of medical care, Katon and coworkers (*38*) delineated three patient characteristics that may affect the primary care provider's accurate recognition and management of a mental disorder: "(1) somatization, (2) the high prevalence of psychiatric symptoms below diagnostic thresholds in patients with recurrent major depression, and (3) chronic medical illness." Somatizing is felt to represent a focus on physical complaints that may mask or represent psychological distress.

These clinical presentations raise another important conceptual and clinical issue—that of co-morbidity. Co-morbidity refers to the co-occurrence of disorders—mental, alcohol, drug, general medical—and a present mental disorder. A recent study demonstrated an increased risk for co-occurring substance use disorders in the presence of mental disorders such as schizophrenia, a mood disorder, or anxiety disorder (*39*). Other researchers have addressed the difficulty in assessing mental disorders in people with serious medical illness and move for greater recognition in this population (*40,41*).

Other patient characteristics may also influence medical management: sociocultural qualities, attitudes such as stigma, and lack of knowledge about mental disorders. An example of how such factors can affect patient care is Miranda's recent work which indicated that standard cognitive-behavioral interventions for depression yielded poorer results in a group of depressed, disadvantaged, medically ill patients seen in an urban primary care center compared with the usual clinical trials in which the study group was comprised of white, medically healthy middle-class people (*42*).

Obstacles to recognition in medical practice. The problems in recognizing and treating mental disorders are not surprising when one considers that the average time spent on each patient in general medical care (including paper work) is 15–20 minutes. Scheduling of patients and reimbursement are both predicated on the providers' ability to see three to four patients per hour. To expect a primary care physician to conduct a physical examination, monitor a patient's historical problems, attend to new complaints, decide whether a cluster of symptoms represents a psychiatric problem, decide on what treatment to administer, provide sufficient education so that the patient understands the nature of the mental health problem, the nature of the treatment, potential side effects of medications, when to expect improvement, when to return for a followup visit, and do appropriate paper work—ALL in the space of a 15-20 minute followup visit—is a next to impossible task as primary care is presently organized.

Alternative methods to deal with the more time consuming aspects of mental health problems in primary care must be considered. While the role of the primary care physician as gatekeeper to a variety of specialty medical care services is not apt to change (thus, detection of mental disorders will always be part of the primary care physician's charge), innovative ways of providing patient education, treatment, and management of mental disorders in primary care must be proposed if physicians are to be more responsive to their patients with mental disorders.

Wells and coworkers (*10*) have shown that for patients visiting general medical clinicians in prepaid plans, their depression was less likely to be detected than for patients in fee-for-service plans (41.8 percent versus 53.7 percent). Although type of practice (health maintenance organization, large multispecialty group practice, or single-specialty solo or small group practice) could not be completely separated from type of payment, the results do suggest that type of payment does influence the providers' detection of mental health problems.

A recent survey of primary care physicians by Rost and coworkers (*43*) found that more than 50 percent of those surveyed used an alternative code for major depression, and at least 30 percent of patients recognized as depressed were deliberately miscoded. The major reasons cited for this miscoding were reimbursement problems, jeopardy of the patient's future health benefits, and lack of confidence about the diagnosis. This research illustrates that a variety of structural practice issues affect detection and management. Furthermore, other real-world concerns include the orphan status of mental health benefits compared with other health benefits and lack of reimbursement for mental health services provided by primary care clinicians.

Preventing Mental Disorders in Primary Care

Increasing the sensitivity and awareness of primary care providers to mental disorders may actually be an early step toward prevention of more serious disorders and future episodes. For example, if depression can be detected and effective treatment initiated early on, then some of the more serious sequelae can be prevented, as well as recurrent episodes. In subsyndromal disorders (such as "minor depression" or heavy drinking), early detection and intervention may prevent the development of full-blown episodes. Sentinel symptoms along with other risk factors (for example, family history) could be used to intervene with high-risk patients. Furthermore, with increasing numbers of studies of mental disorders associated with chronic medical illnesses, physicians may learn to anticipate likely patient psychiatric sequelae to such illness and work to minimize or prevent episodes and symptoms of depression and anxiety. Support groups and work with families may provide some of the social support necessary to blunt the development of a full psychiatric syndrome.

As we gain a better understanding of the co-occurrence of alcohol, drug, and mental disorders, it may be possible to think in terms of preventing the development of secondary mental disorders. For example, early and successful treatment for an anxiety disorder may prevent patients from self-medicating with alcohol or developing a drug abuse disorder, or both. Even more dramatic could be the benefits of early detection and treatment of mental disorders of children and adolescents, especially since recent research has indicated an earlier than suspected age of onset for many disorders (*44*).

Directions for Practice and Research

How to improve the recognition and management of mental disorders in primary care has been studied in three main areas: training, consultation, and feedback.

Training primary care providers to recognize and treat patients with mental disorders more often should probably begin in medical school and be systematically reinforced at regular intervals through the various levels of training and beyond. In the 1970s, the National Institute of Mental Health (NIMH) supported the training of primary care physicians by

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psychiatrists (*45*), and this need for linkage between the two disciplines has recently been called for again (*46,47*). Several models for this kind of training have also been proposed (*48,49*).

Some of the research on training has focused on interviewing skills; other research on consultation-liaison interventions in primary care has had methodologic problems (*28*). A study in progress by Roter and coworkers, however, has demonstrated that a specialized continuing medical education program for primary physicians is effective in improving detection of psychosocial distress in their patients (*50*). The program targets physician-patient communication. Another study by Badger and co-workers (*51*) is examining community-based primary care physicians' interviews with simulated depressed and non-depressed "patients." Its results will be used to design educational interventions to improve diagnostic and therapeutic decision-making. The development of a primary care version of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, (DSM IV)—the psychiatric diagnostic manual—is underway with representatives from all primary care disciplines; this manual may serve as an excellent educational tool and may stimulate more research.

In consultation-liaison interventions, mental health specialists (based in the general medical setting) directly serve as consultants, patient providers (usually short-term), or educators (liaison) for nonmental health care providers. These interventions can often help to improve diagnosis and management, although more research data are needed (*28*).

Professional organizations, Federal mandate, and concern about quality of care have given rise to a new directive that may have a tremendous impact on the types, quality, and effectiveness of mental health services delivered by primary care physicians, as well as on physician education—clinical practice guidelines. Two psychiatric professional organizations have undertaken the production of clinical guidelines: the American Academy of Child and Adolescent Psychiatry for attention deficit-hyperactivity disorder and the American Psychiatric Association for a number of conditions (for example, depression and eating disorders).

Additionally, the Agency for Health Care Policy and Research, part of the Public Health Service, operating under congressional mandate, has been responsible for the development of practice guidelines for common outpatient medical conditions. Depression, as seen in primary care, was chosen for the first wave of guidelines, along with other conditions such as acute post-operative pain and urinary incontinence. The guidelines for the treatment of depression in primary care were released recently (*52*), and plans are well along to study their dissemination in clinical practice settings. While the positive implications for primary care are endless; there is guarded concern that possible negative implications include an inflexibility in individual patient care and a direct link to financial remuneration.

Conclusion

Mental disorders are a public health problem. The economic burden of all depressive disorders across the general health care and specialty mental health sectors has been estimated at more than $22 billion per year (unpublished data of Dorothy Rice, health economist, University of California School of Nursing). The detrimental impact of depression on functioning, health status, and disability days has been well documented, as well as an increased risk for suicide (*10,37,53*). Little is known about other mental disorders in primary care, such as anxiety disorders, but this trend may be changing. A National Institutes of Health consensus conference on panic disorder was held recently, and a new 3-year public information initiative from NIMH on the recognition and treatment of panic disorder is under way (*54*).

We offer the following recommendations for research studies that deserve priority attention:

- methodological issues in primary care mental health research, such as the applicability and utility of existing diagnostic systems and screening and management instruments;
- development of new analytic methods or instruments that aid in improving the recognition and management of persons with mental disorders in primary care;
- barriers to the accurate detection and treatment of people with mental disorders in primary care. Examples of barriers include patient variables, such as stigmas, and provider variables, such as lack of knowledge;

- patterns of referral from primary care to the specialty mental health sector and barriers to referral;
- impact of reimbursement and type of practice (for example, managed care) on the recognition, management, and referral of people with mental disorders in primary care.

These recommendations are not all inclusive. We encourage study of special populations that may have greater need of mental health services from the primary care sector and fewer resources (for example, rural populations).

The time is ripe for further investigation into all of these issues in order to ease the suffering of the persons with mental disorders. A recent "Sounding Board" article in the New England Journal of Medicine compellingly called attention to this suffering (*55*). This action is in keeping with two mental health objectives in the major U.S. strategic health planning document, "Healthy People 2000" (*56*):

> 6.13 Increase to at least 50 percent the proportion of primary care providers who routinely review with patients their patients' cognitive, emotional, and behavioral functioning and the resources available to deal with any problems that are identified.
>
> 6.14 Increase to at least 75 percent the proportion of providers of primary care for children who include assessment of cognitive, emotional, and parent-child functioning, with appropriate counseling, referral, and follow-up, in their clinical practices.

Although in this review we point out the many problems involved in recognizing and managing mental disorders in primary care settings, we do not intend it as an indictment of general medical and primary care providers who see these problems daily in their clinical practice. This review is intended to inform clinicians' practice and underscore the tremendous need for more research on people with mental disorders in primary care services—people who suffer, often unnecessarily.

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