

Met and Unmet Needs in the Management of Depressive Disorder in the Community and Primary Care: The Size and Breadth of the Problem

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Numerous epidemiologic studies have revealed the high prevalence of depressive disorders despite the availability of several treatment options that have been proved to be efficacious and safe. The persistence of depression, at a time when treatment options have increased, suggests that there are unmet needs in the clinical management of depression. Aside from improving treatment guidelines, the role of primary care physicians should be redefined to ensure that lifetime depressive disorders are more frequently recognized, diagnosed, and appropriately treated and managed, either by these clinical "gatekeepers" or through referrals to mental health specialists. With this management strategy, access to care can be broadened to include not only the severely ill, but also patients in earlier stages of their depressive illness process who might profit most from modern treatment methods.

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THE SIZE AND BREADTH OF THE PROBLEM

Increasingly sophisticated, large-scale epidemiologic studies of the general population have made evident to researchers, clinicians, and the public that depressive disorders (particularly major depression and dysthymia) are common disorders of the brain, affecting almost 20% of the population during their lifetime. These studies have also clarified the variability in the essential epidemiologic aspects of depression relating to risk factors, course, outcome, associated disabilities, and impairments, highlighting the breadth of unmet needs in treatment.

Prevalence and Natural Course

In an analysis of several previous studies (N = 29,644), the International Consortium in Psychiatric Epidemiology (ICPE)¹ reported a consistently high lifetime prevalence of depression across studies ranging from a low of 9.2% in Mexico to a high of 19.4% in the United States, despite design and cultural differences.^{2–5} The markedly lower 1-year prevalence of 4.8% to 10.7% and 30-day point

prevalence of 2.3% to 5.1% for Mexico and the United States, respectively, underscore the predominantly episodic character of depressive disorders (Table 1).¹

These rates, which are based on the administration of standardized diagnostic interviews for DSM-III-R and DSM-IV affective disorders, are considerably higher than previous estimates gleaned from review articles based on studies done in the 1970s and 1980s.⁶ In fact, in their reanalysis of studies conducted in the 1980s, the Cross-National Collaborative Group⁷ suggested that rates of depression over the past 50 years tended to increase in progressively younger birth cohorts, while the mean age at first onset of depression progressively decreased.⁸ Despite the fact that some controversy still exists about the extent of and reasons for such increases, there is accumulating evidence supporting these findings,^{1,2} indicating that, in the future, further increases in the incidence of depressive disorders in Western industrialized countries are highly likely.

More sophisticated community studies^{3,4} of the *natural course* of depression have also begun to highlight the substantial suffering of patients, which subsequently affects the patients' social networks. Almost 60% of all patients with depression in the community have suffered from more than 1 episode (i.e., recurrent depression), with a mean number of 5.7 episodes (of varying episode duration) by the age of 65 years.⁴ Half of all depressed individuals in the community exhibit a mean episode duration of 9 to 12 weeks; 25%, a duration of 3 to 6 months; while 22.3% fail to remit after 12 months.⁴ Notably, each additional depressive episode further increases the probability of a more rapid onset of yet another episode.⁵ It is also noteworthy that depression occurs quite frequently among adolescents

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Table 1. Lifetime and 12-Month Estimates and 30-Day Prevalence (%) of Mood Disorders in 6 Countries^a

Estimate/ Prevalence	Brazil	Mexico	The Netherlands	Germany	Canada	US
Lifetime estimate	15.5	9.2	18.9	17.1	10.2	19.4
12-Month estimate	7.1	4.8	7.7	9.6	4.9	10.7
30-Day point prevalence	4.9	2.3	4.0	3.6	2.6	5.1

^aAdapted with permission from Andrade et al.¹

Table 2. Mean Number of Disability and Impairment Days Due to Acute Depressive Disorders and Reduction (%) in Work Productivity in the Community^a

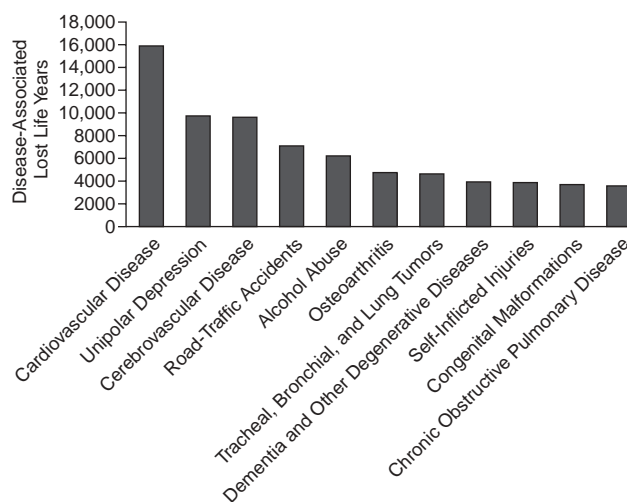
Value	Females	Males	Total
Mean no. of complete disability days/month	9.6	13.0	10.9
Mean no. of impairment days/month	14.4	16.8	15.2
Reduction in work productivity, %	28.9	34.8	30.8

^aData from Wittchen.¹²

after the age of 15 years. The Early Developmental Stages of Psychopathology,⁹ a recent prospective, longitudinal study of adolescents aged 14 to 17 years, revealed baseline prevalences of major depression and dysthymia of 3.4% and 1.7%, respectively; cumulative incidence rates in adolescents up to 19 years of age were 6.3% for major depression and 3.5% for dysthymia. Evidence from primary care studies¹⁰ indicates, however, that depression in this younger age group is the least likely to be recognized, diagnosed, and treated in the health care system compared with depression in other age groups.

Impairment and Disability

Converging evidence from community studies demonstrates that depression is associated with significant functional impairment and disability. From a societal perspective, role impairment has become a focal point for purposes of evaluating cost-benefit ratios. There are several reasons why the assessment of impairment associated with depressive disorders is of major interest: (1) depressive disorders are highly prevalent; (2) especially among younger birth cohorts, depressive disorders frequently have an early onset (i.e., later adolescence, early adulthood), during a period in life when successful professional socialization is a common goal; (3) depressive disorders are chronic illnesses in at least one third of all depression patients; (4) recognition and proper state-of-the-art treatment of depressive disorders in the health care system are the exception rather than the rule, their absence leading not only to costly misallocation of resources but also to poor prognosis and increased impairment and disability; and (5) depressive disorders have a strong negative impact on the patient's environment, potentially increasing the socioeco-

Figure 1. Leading Causes of Disease-Associated Lost Life Years Due to Disability Worldwide in 1990^a

^aAdapted with permission from Hegerl.¹⁷

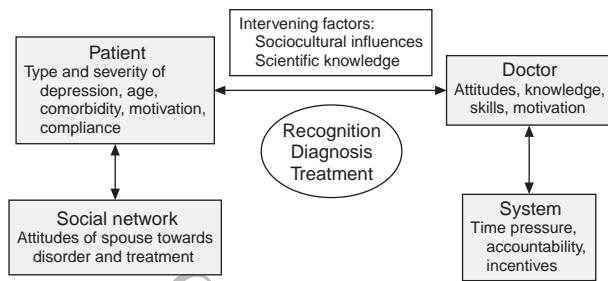
omic burden of the disorders. The frequency and the extent of impairment in depressed patients have been highlighted in several studies. For example, the German Health and Examination Survey¹¹ showed that patients with acute depression almost always exhibited marked disability (disability and impairment days in the past month; Table 2).¹² A gender difference was noted wherein males had a significantly higher mean number of disability days than females (13.0 vs. 9.6, $p < .001$). Even after remission, patients still demonstrated prolonged reductions in work productivity that persisted for months after resolution of the episode.¹³ These disability findings are consistent with those of several other past¹⁴ and recent¹⁵ health economic impact studies.

In its worldwide projection, the Global Burden of Disease Study¹⁶ concluded that the burden of depression has, so far, been grossly underestimated. Of the 10 leading causes of disability worldwide in 1990 (measured in years lived with a disability), 5 were psychiatric conditions, with unipolar major depression being second (Figure 1)¹⁷ among all medical disorders encompassing the physical, social, and mental aspects of disease. Likewise, depression is predicted to be the second leading cause of disability by the year 2020,¹⁶ due to the persistent increase in rates of depression.

Comorbidity

Comorbidity (i.e., the co-occurrence of 2 or more mental disorders within a specified time frame) is another clinical epidemiologic finding shown to have important implications in prognosis and appropriate management of depression.¹⁸ Careful cross-sectional studies in the community have demonstrated that comorbidity of depressive dis-

Figure 2. The Interplay of Factors Involved in the Recognition, Diagnosis, and Treatment of Depression



orders with other mental disorders, especially with anxiety disorders, is not merely an artifact but a core cross-sectional and lifetime characteristic of depression that has important clinical and theoretical/nosologic implications.¹⁹⁻²² The U.S. National Comorbidity Survey²³ indicated that most depressive disorder patients also have at least 1 other mental disorder, most frequently primary anxiety disorders that precede the onset of depression, often by many years. This consistent finding has led to the conclusion that anxiety disorders are, indeed, potent risk factors for depression.²⁴ The high degree of cross-sectional²⁵ and sequential anxiety and depression comorbidity has significant effects on the natural course of depressive disorders, increasing relapse risk and illness chronicity.^{21,26}

DEPRESSION: POORLY RECOGNIZED AND RARELY TREATED?

From a public health perspective, depression is associated with significant impairment, disability, and costs; depression elicits suffering from patients and their families. Considering the increasing burden of depressive disorders on societies around the world, it is remarkable that only a small fraction of depressed individuals receive any professional interventions, and even fewer receive appropriate treatment.

Data from the ICPE survey (2000)¹ indicate that approximately one fifth of respondents with a depressive disorder in the past 12 months received some type of treatment in Canada (21.8%) and the United States (22.3%); only slightly more received treatment in the Netherlands (31.7%) and Germany (29.2%). The vast majority of patients in these countries were cared for exclusively in the primary health care sector; only a few received treatment from mental health specialists. It is noteworthy that intervention or treatment in this analysis was merely defined as "any treatment contact," regardless of the type, dose, and duration of treatment. Furthermore, a disturbing finding from the ICPE data is that most patients are not treated for many years after the first onset of their disorder.²⁷

Whether these low treatment rates are due to the patients' poor help-seeking behavior, the structural barriers in the health care system, or the health service providers' poor recognition and diagnosis of depression is not entirely clear. However, the revelation that these low treatment rates are not confined to countries without health care and insurance plans suggests a multifactorial basis for this problem (Figure 2).

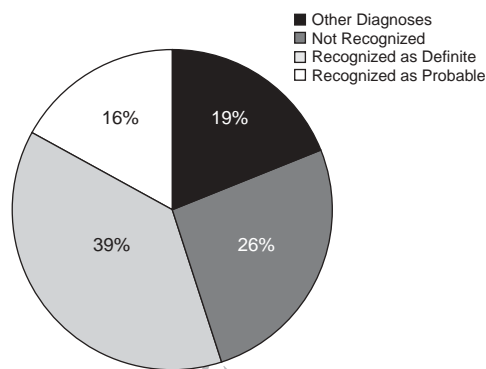
An increasing number of studies have begun to examine the determinants of low treatment rates for depressive disorders by emphasizing the pivotal role of primary care doctors in most health care systems.²⁸ At least 3 main reasons for increased attention to the primary care sector are relevant. First, the majority of the population reports at least 1 primary care visit per year; these visits are typically maintained as a stable, enduring, and sometimes lifelong relationship. Second, in most health care systems, the primary care doctor is the core "gatekeeper" who is responsible for recognition, referral, and treatment. Finally, the increased availability and accessibility of effective pharmacologic treatments for depression have shifted the emphasis of treatment from the mental health sector into primary care.

Point Prevalence, Recognition, and Interventions in Primary Care

The recent multistage, nationwide (in Germany) "Depression 2000" study,¹² involving a nationally representative sample of 412 primary care doctors, was designed to explore depression prevalence and recognition, prescription practices, and physician intervention behavior.¹⁰ On the day of study implementation, all primary care patient attendees in each setting were screened for the presence of major depression using the Depression Screening Questionnaire,²⁹ which probes the onset, number, and duration of episodes and past treatments. All 15,081 patients were subsequently examined by their primary care physician, who completed a structured clinical appraisal. This appraisal reflects illness recognition rates and evaluates the physician's intervention strategy toward each patient.

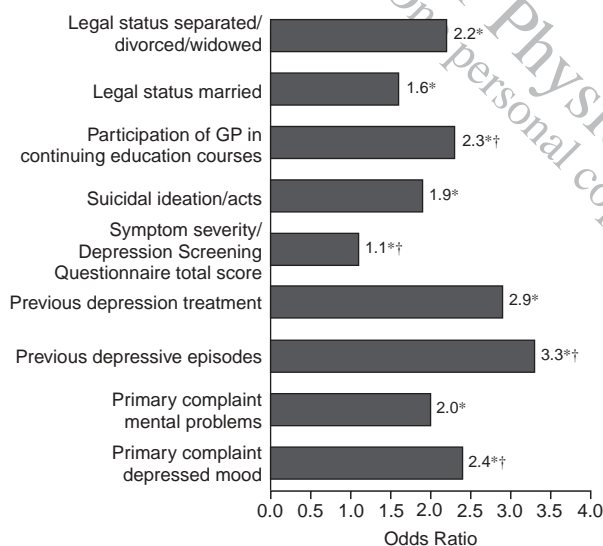
Of the random sample of primary care patient participants, 10.9% fulfilled research diagnostic criteria for a DSM-IV major depressive episode (females, 11.9%; males, 9.4%).²⁴ Although 74% of these patients with major depressive disorder were recognized by the primary care physician as having a clinically severe mental health problem (using the Clinical Global Impressions scale), only 38.5% were correctly diagnosed as having "definite" depression, while 16.3% were identified as having "probable" depression (Figure 3).¹² Recognition rates were especially poor in males and females below the age of 40 years, with correct identification rates of only 27% and 33%, respectively. Findings also revealed that the most important predictors for correct recognition of depression included the following: (1) depressed mood as the primary reason for contacting the

Figure 3. Proportions of Patients Recognized by Primary Care Physicians as Having Depression or Other Psychiatric Disorders^a



^aData from Wittchen.¹² Patient N = 15,081; physician N = 412, point prevalence of depressive disorder = 10.9 (N = 1593).

Figure 4. Predictors of Correct Diagnosis of Depression by General Practitioners (GPs)^a



^aData from Wittchen.¹²
 *p < .05 univariate analysis.
 †p < .05 multiple model analysis.

doctor, (2) prior depression treatment history, (3) high symptom severity, (4) higher age of the patient, and (5) frequent participation of the doctor in continuing education courses on depression (Figure 4).¹²

Figure 5¹² reveals that this unsatisfactory recognition pattern, and particularly the diagnostic imprecision, has remarkable effects on subsequent physician intervention behavior. Over 40% of all patients meeting DSM-IV criteria for major depressive disorder failed to receive any treatment or any kind of significant intervention. Those who were correctly recognized by the primary care physician

as having “probable depression” had the greatest likelihood (65.8%) of receiving first-line antidepressants (36.8%) or psychotherapy (7.1%) or being referred to a mental health specialist (21.9%). Despite their having no significant differences in symptomatology, patients with major depressive disorder who were recognized only as having a mental health problem, without a specific depression diagnosis, received first-line treatments considerably less frequently than those diagnosed with probable depression (42.3%), and patients who were not rated by doctors as having a clinically significant problem were largely untreated.

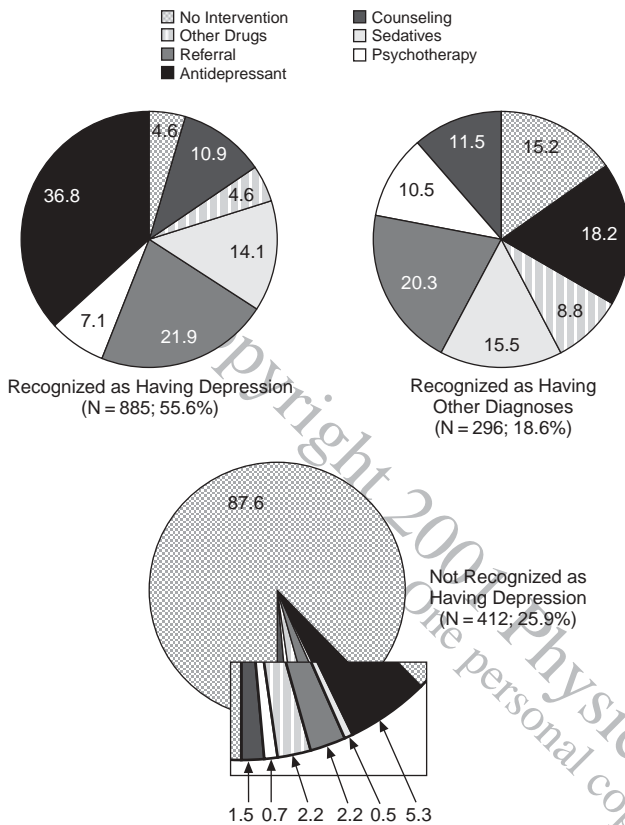
It is discouraging to note that these recent findings were, in fact, only slightly more promising than previous findings in many countries. For example, similar results indicating poor recognition and treatment of depression were described in a World Health Organization multi-center study on psychological problems in primary care,²⁸ studies in the Netherlands and the United States,³⁰⁻³² and the pan-European DEPRES study.³³

THE NEED FOR COMPREHENSIVE NEEDS ASSESSMENT STUDIES TO BRIDGE THE GAP BETWEEN RESEARCH AND CLINICAL CARE

Epidemiologic studies during the past 2 decades have provided an increasingly sharper picture of the prevalence of depressive disorders. However, marked deficits in appropriate recognition, long-term prevention, and management of acute and chronic cases of depression have also become apparent. Thus far, these epidemiologic studies have been largely confined to primary care settings, and, unfortunately, investigations with attention to a similar level of detail have not been conducted in the mental health specialty sector. However, there are few reasons to believe that studies involving psychiatrists and psychotherapists would reveal a considerably better profile of care for patients with depression. Thus, it seems fair to state that comprehensive needs assessment studies that go beyond the mere demonstration of deficits in illness recognition and identification of crude indicators of prescription behavior in a single segment of the health care system are urgently needed.

In most industrialized countries, comprehensive, interdisciplinary mental health system providers that strive to improve the availability and continuity of appropriate treatments throughout the illness process have emerged during the past 2 decades. In comparison to the 1970s, more antidepressants and psychological therapies are available today that have demonstrated efficacy in the treatment of various types of acute depressive disorders, thereby creating a therapeutic potential for preventing relapse and facilitating remission. Clinical management guidelines recommend more complex combined drug-psychotherapy interventions that transcend the simple and naive counsel-

Figure 5. Interventions for and Diagnostic Recognition of Major Depression in Primary Care^a



^aAdapted with permission from Wittchen.¹²

ing practices commonly applied in clinical routine. Yet, the available evidence suggests that these more or less complex mental health care networks and their current level of coordination sufficiently match neither the needs of depressed patients nor the expectations set forth by experts. The complexity of existing various treatments and patient management strategies developed by experts in research settings has to be more appropriately translated into clinical routine, not only to improve patients' acute suffering, but also to treat patients to long-term recovery and improve their quality of life. Partial response, incomplete remission, and undetected or persisting comorbid vulnerabilities have all been demonstrated to be long-term predictors of unfavorable outcome.

Comprehensive needs assessment studies on the regional and national levels are urgently needed to provide guidance and rational criteria for new standards for treatment of depression and other mental disorders. The key objectives of such needs assessment studies should include (1) a better understanding of the met and unmet needs of patients with depression as they relate to the specific services and treatments in early and later stages of patients' illness, (2) the implementation of a compre-

Table 3. Types of Questions Related to Comprehensive Needs Assessment

Stepwise Question	Evaluative Activity and Subsequent Improvement
Describe a patient with depression	Improving earlier and more reliable recognition as well as diagnostic skills for patients with depressive disorders in all age and risk groups
What do patients need?	Identifying the patients' needs in terms of choosing the most promising type, duration, and complexity of treatments and supportive activities
Do patients get what they need?	Identifying inappropriate use of services and treatments as well as ineffective or inadequate patterns of treatments and service delivery
How can structure and process of services and delivery of better treatments be improved?	Stepwise planning, implementation, and subsequent evaluation of changes for improvement by follow-up studies and monitoring

hensive service evaluation of all health care providers involved in the care of the depressive patient to determine currently preferred practices of diagnosis and treatment, and (3) a coordinated effort to implement expert recommendations regarding the most adequate treatment for specific patient populations in routine care. The basic prerequisites and the design (Table 3) of such patient-oriented needs evaluation studies seem to be in place. The core elements of needs assessment are a reliable definition of a disorder and clear definitions of associated disabilities and existing effective intervention strategies (taking into account both their limitations and modes of delivery; see Table 3). Hence, such comprehensive needs assessments are clearly lacking.³⁴

Such endeavors must, however, acknowledge several limitations and problems: (1) it is neither adequate nor financially feasible to rely on diagnosis of depression alone when allocating such complex treatment strategies, given the high prevalence, the variability in terms of severity, patterns of course, and associated disabilities, as well as the considerable degree of comorbidity present and (2) the breadth and agenda for change will be different by country, system, and even region (e.g., rural vs. urban areas). For example, health care systems that are neither able nor willing to offer comprehensive and highly specialized mental health care interventions for their population will probably have different priorities (e.g., "Care only for the most severely ill") than most of the well-developed comprehensive systems in industrialized countries that offer fairly unrestricted access to drug and psychotherapeutic treatments, even free of charge. Therefore, priorities regarding assessment tools and evaluative activities will necessarily vary widely by region and system. Some systems will primarily aim at the identification of the "severely ill" to ensure basic care for those most disturbed and disabled, while others will aim at optimizing resources beyond the very ill, including prevention, early treatment, and a much

wider range of drug and behavioral treatments with established effectiveness. Current perspectives on this issue seem to overemphasize 2 strategies: the development of reliable and valid measures of disability^{35,36} and the search for other “marker” variables identifying those in greatest need or most severely ill. In light of the prevalence, the characteristics, and the natural course of depressive disorders, this perspective clearly falls short.

CONCLUSION

Core elements in ensuring that lifetime depressive disorders are more frequently recognized, diagnosed, and appropriately treated and managed will probably include a redefinition of the role of primary care physicians and the improvement of management guidelines because, as physicians on the “front lines,” primary care physicians are the gatekeepers who eventually refer patients to a mental health specialist. Aside from the need for primary care physicians to adopt the routine use of depression screening scales and improve specific diagnostic skills for depressive disorders,¹⁹ access to care should be broadened to include not only the severely ill, but also those in earlier stages of their depressive illness process who might profit most from modern treatment methods. The young age group with major depression, notably young females and particularly those experiencing their first episode of depression, are those whose illness is most underrecognized and poorly treated. In light of a substantial increase in the incidence of depression in successively younger birth cohorts, clinical management strategies to improve this situation are of high priority.

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