Caring for patients in mental health settings means fully engaging them using the 3 “Cs”: communication, clarity, and collaboration. Ample opportunity also exists for clear communication and collaboration among different health care providers. Two important documents are essential reading for clinicians who practice in mental health:

1. the Institute of Medicine’s (IOM’s) 2002 report, “Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care,” and
2. the Surgeon General’s supplement to his 1999 report on mental health in the United States, “Mental Health: Culture, Race and Ethnicity.”

The Institute of Medicine report starts with this quote from Goethe: “Knowing is not enough; we must apply. Willing is not enough; we must do.” For all health care providers, the impetus now is to know our individual patients’ wants, needs, and differences and to do what is necessary to help them become well.

The World Health Organization (WHO) has estimated that as many as 340 million people worldwide will experience a major depressive episode. In the United States, about 18 million people have experienced a major depressive episode. Further, chronic medical illnesses may result in MDD, and patients from ethnic minorities often respond to medications differently from whites. Each patient’s culture and ethnicity must be addressed when they present. Clinicians should always ask, “Are there any cultural issues at work here?”

CONCLUSION: Cultural competence is a journey, not a destination, and every provider must learn to question carefully, appreciate culture’s role, and help patients work with them to achieve a better mental and physical health status.

KEYWORDS: Culture, Ethnicity, Cultural competence, Major depressive disorder, Metabolizers

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The Influence of Setting

In general medical settings, those with MDD usually exhibit increased pain and physical illness, although they may also report decreased social, physical, and role functioning. The typical patient will present with somatic complaints and impaired func-
tioning at work or in relationships. Often, they do not think they are experiencing a major depressive episode. Research in nursing homes has found that residents with untreated MDD are at increased risk of death in the first year. Thus, significant morbidity and mortality are possible.6

WHO, World Bank, and Harvard University conducted a study, in which they used disability-adjusted life-years (DALYs), measuring unhealthy years of life. In 1990, they ranked lower-respiratory infections as the primary cause of disability worldwide; unipolar major depression ranked fourth. In 1990, the annual cost of depression was conservatively estimated at $44 billion. These experts predict that unipolar major depression will be a significant cause of DALYs in 2020, probably moving into second place behind ischemic heart disease. Since many people who have MDD remain untreated, the cost in real dollars and in years of life lost is considerable and difficult to estimate accurately.7

### Accurate Diagnosis

Once patients seek or are referred for treatment, accurate diagnosis is very important. In addition to accurately diagnosing MDD, clinicians must gauge its severity and measure dangerousness, especially to self (suicidality). Chronicity is also an issue. Depression is a chronic medical illness like diabetes or hypertension. Communicating that most mental disorders are chronic is crucial.

Myths about depression abound. People who embrace these myths view depression as a serious spiritual weakness or character flaw, which it is not. They perceive moodiness or depression in adolescents and elders as normal. Teasing out normal (periodic sad moods) from abnormal can be difficult, but true clinical depression is never normal.

Psychiatry's cornerstone is the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), researched and published by the American Psychiatric Association (APA). A diagnosis of major depression requires the presence of 5 or more specific symptoms in the same 2-week period (Table 1). Should the symptoms occur with decreased ability to function, the criteria for an MDD are met.

### Societal Stigma

Psychiatric illness is still plagued by stigma. According to Lawrence Martin, director of the Mood Disorders Clinic at St. Joseph's Hospital in Ontario, “[Depression] is a very lethal illness. It’s very painful. People who have been depressed and had cancer . . . have said they would rather have cancer again than depression. With cancer they knew what was happening. There was pain, but it was just pain. With depression it was pain, self doubt, feelings of guilt about their lives, emptiness, and hopelessness.”8

In addition, clinicians must probe further with patients who offer vague complaints. We must broaden how we think about the illness so we don’t miss people with atypical presentation (data confirm physicians miss this diagnosis often).9 Vague aches and pains are symptoms of depression; the APA recently decided to add these symptoms to the DSM-IV-TR criteria, and this change deserves additional attention.

### TABLE 1 DSM-IV-TR Criteria for Major Depressive Episode

<table>
<thead>
<tr>
<th>25 symptoms in the same 2-week period</th>
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</thead>
<tbody>
<tr>
<td>Sleep: insomnia or hypersomnia</td>
</tr>
<tr>
<td>Interest: depressed mood,* loss of interest or pleasure*</td>
</tr>
<tr>
<td>Guilt: feelings of worthlessness</td>
</tr>
<tr>
<td>Energy: fatigue</td>
</tr>
<tr>
<td>Concentration: diminished ability to think or make decisions</td>
</tr>
<tr>
<td>Appetite: weight change</td>
</tr>
<tr>
<td>Psychomotor: psychomotor retardation or agitation</td>
</tr>
<tr>
<td>Suicidality: preoccupation with death, hopelessness</td>
</tr>
</tbody>
</table>

*Must include 1 of these.


### Shifting Focus

Our focus must shift, especially with racial and ethnic minorities. African Americans, for example, often come to our clinical attention complaining more about general and migrating aches and pains. They may initially complain of a headache, then a stomachache, a knee-ache, back pain, and then GI disturbances, including constipation, diarrhea, some vomiting, joint pain, or fatigue. A significant appetite change may follow.

Concerned that a substantial proportion of physical complaints and minor illnesses remain poorly understood, researchers interviewed 13,538 individuals in the Epidemiologic Catchment Area Program. Focusing on 26 common symptoms, they found that 24 had been problems for more than 10% of participants at some point. Most often, subjects reported joint pains (36.7%), back pain (31.5%), headaches (24.9%), chest pain (24.6%), arm or leg pain (24.3%), abdominal pain (23.6%), fatigue (23.6%), and dizziness (23.2%). Subjects considered these severe 84% of the time and said that they interfered with activity, required medications, or prompted a visit to a physician. The researchers associated most symptoms with at least a 2-fold increased lifetime risk for a psychiatric disorder.9

### Influences Affecting Major Depressive Disorder

In the past, clinicians had a tendency to partition medical and psychiatric illness, considering them separate and distinct. Yet, significant data exist indicating that 20% to 25% of individuals with serious or chronic medical conditions will develop MDD.10 Additionally, studies confirm that people who have myocardial infarctions have less-favorable prognoses if they have untreated MDD.11

Although researchers acknowledge a relationship between hormones and mood symptoms, the connection has not been elucidated. Depressive disorders occur twice as frequently in women in their reproductive years as in men. Sometimes, symptoms worsen in women with MDD several days prior to menses. And, work with perimenopausal women proves that hormones can affect mood, memory, and thinking.12

### Culture’s Role

Culture can influence diagnosis, experience, and communication of symptoms. Some patients may have difficulty saying “I am..."
sad” or “I am depressed” but can more easily say “I have bad nerves” or report vague somatic complaints.\textsuperscript{14} The direct language from the \textit{DSM-IV-TR} says it best: Underdiagnosis or misdiagnosis can be reduced by being alert to ethnic and cultural specificity in the presenting complaints of a Major Depressive Episode. For example, in some cultures, depression may be experienced largely in somatic terms, rather than with sadness or guilt. Complaints of “nerves” and headaches (in Latino and Mediterranean cultures), or weakness, tiredness, or “imbalance” (in Chinese and Asian cultures), or problems of the “heart” (in Middle Eastern cultures), or of being “heartbroken” (among the Hopi) may express the depressive experience. Such presentations combine features of the Depressive, Anxiety, and Somatoform Disorders. Cultures also may differ in judgments about the seriousness of experiencing or expressing dysphoria (e.g., irritability may provoke greater concern than sadness or withdrawal). It is also imperative that the clinician not routinely dismiss a symptom merely because it is viewed as the “norm” for a culture.\textsuperscript{14} Applying likelihoods indiscriminately is stereotyping. Within a culture, other factors affect members’ perception, communication, and presentation. For example, first-generation immigrants will differ from subsequent generations. Additionally, no cultural competence workshop can make an individual culturally competent. Cultural competence is a journey, not a destination. Clinicians must anticipate variations and differences.\textsuperscript{15,16} In a study conducted in 1991-1992 and published in the \textit{New England Journal of Medicine} in 1999, Simon and colleagues examined the relationship between somatic symptoms and depression from the WHO’s study of psychological problems in general health care. After screening 25,916 patients in 14 countries, they found that 69% of patients with depression reported only somatic symptoms. Hispanics, African Americans, and Asians were more likely to have physical complaints in depression than whites.\textsuperscript{17}

### Treatment Versus Cure

Depression is treatable, but it is not curable. Fewer than half of those diagnosed with MDD seek treatment. This is particularly distressing because available treatments can prevent the significant morbidity and mortality associated with MDD. Why do so few people seek help? Stigma remains a significant barrier. Funding discrimination also affects treatment. Copayments for physician visits can be discriminatory, especially if the patient is a Medicare beneficiary. Medicare requires a copayment of 20% for most physicians, but it increases to 50% for a psychiatrist’s outpatient visits. Patients are often unaware of this difference and may be unable to continue treatment because of the financial burden of the copay. Many insurance companies also discriminate when it comes to mental health coverage of benefits. Stakeholders are working on federal legislation to establish parity. In the public sector, adequate funding for the mental health system is often a lower priority.

Population trends, our increasing knowledge about culture’s impact, and the propensity for studies to underenroll or even exclude minorities indicate why improving cultural competence is essential. Table 2 shows how the U.S. population is distributed among different ethnic groups.

### What Is Culture?

Defining terms like culture, ethnicity, race, and cultural competence is difficult because of a variation in meanings. A working definition of ethnicity might be “a collectivity of people within a larger society defined on the basis of both common origins, shared symbols, and standards for behavior.”\textsuperscript{18} Race refers to broad divisions of the human species, based on a common geographic origin and certain shared characteristics and being distinguished from other such groups by a characteristic gene frequency distribution. Cultural competency—a state of having a demonstrated ability to incorporate cultural concepts and data into care—is an ever-evolving process. On every multidisciplinary treatment team, someone should ask the question, “Are there any cultural issues here?”

The IOM report and the Surgeon General’s report reiterate the need for each health system and clinician to have a process or system to examine cultural issues. Disparate access to care for racial and ethnic minorities is often based on socioeconomic status.\textsuperscript{1,2}

### Racial Variation: An Overview

Universal access to health care is a primary challenge for health care administrators. When researchers examined cardiovascular health and corrected for socioeconomic status, care was still disparate, proving not everything can be blamed on socioeconomic status.\textsuperscript{19}

Increasing evidence also points to racial variation in the way patients present with symptoms, are diagnosed and treated, and respond to treatment. For example, African American psychiatric patients are disproportionately diagnosed with schizophrenia compared with white patients, but the reason is unknown. Researchers looked at 195 African American and white patients with at least 1 psychotic symptom (delusions, hallucinations, or prominent thought disorder) at admission during a 6-month period. Each patient was diagnosed clinically, by structured-interview, and by an expert-consensus team. African American men diagnosed by expert consensus with an affective disorder were significantly more likely than others to be diagnosed with schizophrenia, clinically or by structured interview. First-rank symptoms were more common in African American men, but this failed to explain the diagnosis bias. The difference may be due to clinician perception that psychotic symptoms are more chronic or persistent than affec-

### Table 2: U.S. Population by Race and Hispanic Origin: 2025 Projection

<table>
<thead>
<tr>
<th>Race and Hispanic Origin</th>
<th>Population (2025 Projection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>337.8 million</td>
</tr>
<tr>
<td>White</td>
<td>209.3 million</td>
</tr>
<tr>
<td>African American</td>
<td>43.5 million</td>
</tr>
<tr>
<td>American Indian/Alaskan</td>
<td>2.7 million</td>
</tr>
<tr>
<td>Hispanic</td>
<td>61.4 million</td>
</tr>
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</tr>
</tbody>
</table>

tive symptoms in African American males.\textsuperscript{20} Fortunately, this bias seems to be changing.

Despite available treatments, few people with depression, across races and ethnicities, receive appropriate care. Minorities have poorer health status and more chronic conditions than whites, with Hispanic and Mexican Americans most disabled; the differences are more striking when taking into account that the minority population is, on average, younger than the white population.\textsuperscript{21} In terms of communication, Hispanic Americans have a greater problem understanding and communicating, with 43% reporting at least 1 problem communicating with their physician. Obviously, when patients seek health care treatment where their primary language is not spoken, equal access to treatment is impossible. Communication problems cause very poor outcomes with prescription writing and medication.\textsuperscript{21}

Optimal health care is best delivered when the primary care provider knows the patient’s history and sees the patient regularly. Minority adults are less likely to have a usual source of care for many reasons: funding, perception of cost, and lack of trust. For all minorities, the likelihood of not having a regular doctor exceeds 20%; for Asian Americans, it exceeds 30% and for Hispanic Americans, it exceeds 40%.\textsuperscript{21} The Tuskegee Study, in which 399 African American males were not treated for syphilis so researchers could see its natural progression, has led to lingering suspicion of “experimentation.” The belief by minorities that such research conduct still exists has had a significant impact on clinical trials even though certain human rights protections are now in place. Society must reconcile minority people’s perception of clinical trials with today’s realities.

Minority adults also trust physicians less than do their white counterparts. A study that examined how closely patients followed doctors’ orders found that whites followed orders 91% of the time, but minority adults did so only 84% of the time, a small but significant difference. The study found that only about half of patients, regardless of race, trust physicians.\textsuperscript{21}

Minority patients are also less likely to be treated by doctors of their own race and ethnicity. Thus, having a culturally competent clinician is imperative. Because of the shortage of minority clinicians, a perfect race-ethnicity-gender match is unlikely, even though some people would prefer that. This is an important issue to discuss even if it represents an impossibility.\textsuperscript{21} Figure 1 describes the specific reasons why doctors’ advice is not followed, broken down by race and ethnicity. Clinicians who are not culturally competent will miss subtleties such as advice that violates the patient’s personal beliefs.

\section*{Racial Variation and Ethnic Disparities}

Disparities exist in the access and quality of mental health services and pharmacologic treatments that might be beneficial to patients of different ethnic backgrounds. Studies, including the IOM report, confirm disparities. In a national survey, a larger percentage of minority patients reported not receiving needed medical care than white patients.\textsuperscript{22} Minority adults report many barriers to receiving appropriate health care, including paying for care, waiting times, and receiving specialty and preventive care. Minorities also report having fewer location choices for health care delivery. A larger percentage of minority patients (29% of African Americans, 37% of Hispanics) lack insurance coverage than white patients (12%).\textsuperscript{23} A study of 15,578 people nationwide who sought care in emergency departments found that blacks were 1.5 times more likely than whites to be denied authorization by their managed care plans.\textsuperscript{24} Access to antidepressant treatment has been especially difficult in certain vulnerable populations. Specifically, in one study, Medicaid and African American patients were less likely to receive selective serotonin reuptake inhibitors (SSRIs) than tricyclic antidepressants (TCAs) than privately insured patients.\textsuperscript{23}

After controlling for potential confounding factors, researchers following patients after mental health hospitalization learned that clinical quality performance ratings were much lower for African Americans than whites.\textsuperscript{21} A smaller proportion of minority patients report being satisfied with their care than white patients (46% versus 60%, respectively).\textsuperscript{21} African Americans were significantly less likely to receive an antidepressant at the time of their initial depression diagnosis than whites (28% versus 44%, respectively).\textsuperscript{23}

\section*{Response Variation}

Response to psychopharmacologic agents varies by ethnicity. Therefore, access to a wide range of agents is necessary for the successful treatment of all patients. Both the patient profile and the drug profile are important considerations.\textsuperscript{24}

In terms of the patient, several factors are important: age, gender (sexual functioning, teratogenic risk, breastfeeding), ethnicity, cultural influences, behavior (adherence issues), and occupation (e.g., the need to remain alert). Consider a woman of child-bearing age; she may promise to avoid pregnancy but may discontinue...
birth control. Or consider occupation: a forklift driver or a pilot cannot take something very sedating because their occupations require them to be alert. Although all medications tend to cause some sedation initially, continuing sedation is an intrusive problem.

The patient’s health status is also a concern. Liver and kidney function will affect drug metabolism and excretion. Heart functioning, especially a tendency toward orthostatic hypotension, can be a concern. A history of allergic and idiosyncratic reactions will certainly sway any decisions. A history of vulnerability to neurotoxicity, especially in drug-addicted patients, is a concern. It is wise to ask patients if they abuse or have abused drugs, have had a brain injury, or have experienced any other illness that is directly neurotoxic.

Although these drugs target the brain, they affect the rest of the body, too. Medical history that considers comorbid diseases and the presence of any other risk factors (i.e., altered electrolytes) is important. Past treatment efficacy offers an excellent clue to what will work. When patients are adamant that a certain medication did not work, clinicians must listen and ask direct questions.

Identifying factors that determine racial variation in drug response is a burgeoning science. Figure 2 demonstrates our understanding of how biological factors, genetics, age, gender, disease, etc., interplay with cultural factors, attitudes, and beliefs.

Compliance, or the more patient-friendly term adherence, also varies with culture. Minorities may be less likely to be compliant. Cultural views about medication (i.e., the doctor gave you medication because you are “crazy”) or lack of information about pharmacotherapy can be barriers to compliance. Media and community susceptibility (i.e., “they are doping up kids on attention-deficit/hyperactivity disorder medication”) and reports of side effects, even if they are just rumors, contribute to nonadherence.

Considerable cultural, genetic, and psychosocial interindividual and interethnic differences exist, which influence the effectiveness of pharmacotherapy. Cultural factors include diet and food preference, use of herbal products, physicians’ bias when diagnosing, patients’ beliefs and expectations, and placebo effect.

Genetic variations in drug metabolism may influence the effectiveness of pharmacotherapies in mental health. Certain people are slow metabolizers; others are fast metabolizers. Rates of metabolism vary individually, and they vary within groups. Up to 90% of psychotherapeutic drugs are metabolized by the cytochrome P450 system. Polymorphism of CYP2D6 (which is responsible for metabolism of the TCAs, the SSRIs, many of the conventional neuroleptics, and risperidone and clozapine) is influenced by gender, race, and age. Unfortunately, technology that would tell us in advance which patients have a variation is nonexistent. Clinicians must monitor patients’ responses, knowing that up to 10% of whites and up to 19% of African Americans are poor metabolizers.25

Similarly, many of the TCAs and SSRIs are metabolized by CYP 2C19, which also occurs in various forms. These enzymes usually process more than 1 type of pharmacotherapy. Clinicians should be aware that up to 33% of African Americans, 37% of Asians, and 39% of Panamanians are slow metabolizers of antipsychotic drugs and antidepressants.26

African Americans are more susceptible to the central nervous system side effects of TCAs, which achieve higher concentrations in the bloodstream. For benzodiazepines, usually diazepam or alprazolam, studies consistently find slower metabolism and more negative impact on psychomotor performance in African Americans. Populations with higher incidences of impaired enzymes have been associated with increased blood levels of these drugs, diminished pharmacological effect, and more frequent side effects. If the parent drug is a pro-drug, the patient may be insensitive to any effect at all.26

Studies have shown that African Americans tend to respond more quickly to antipsychotic medication and TCAs than white patients, probably due to differences in drug metabolism in the cytochrome P450 microsomal enzyme system.27 Between 47% and 70% of African Americans and Asian Americans may be slow metabolizers, which could account for higher drug concentrations and incidences of side effects. Newer agents with less effect on the hepatic P450 (like SSRIs and serotonin-norepinephrine reuptake inhibitors) may reduce the likelihood of toxicity and overdose for ethnic minorities.28

Conclusion

Every sector of our health care system has a role in improving care and creating a safety net for people with MDD. Cost-management strategies to restrict access to pharmaceuticals, such as formularies, step-care protocols, and tiered copayments, should be broad and flexible enough to enable rational choices of drugs and dosages for all patients regardless of race or ethnic origin. Physicians should give individualized treatment to each patient and resist the temptation to apply cookbook drug therapy that does not consider race and ethnicity. Pharmaceutical companies should promote inclusion of significant numbers of patients representing varied racial and ethnic groups in clinical trials.
DISCLOSURES

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REFERENCES


