New research findings that are changing clinical practice

Amar K. Das, MD, PhD, Mark Olfson, MD, MPH, Henry L. McCurtis, MD, and Myrna M. Weissman, PhD

Departments of Medicine and of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, Calif (AKD); Department of Psychiatry, Columbia University College of Physicians and Surgeons, New York, NY (MO, HLM, MMW); New York State Psychiatric Institute, New York, NY (MO, MMW); Harlem Hospital, Department of Psychiatry, New York, NY (HLM)

# Depression in African Americans: Breaking barriers to detection and treatment

Community-based studies tend to ignore high-risk groups of African Americans

#### Practice recommendations

- When evaluating African Americans for depression, look for somatic and neurovegetative symptoms rather than mood or cognitive symptoms (C).
- Education can help patients better tolerate drug regimens and improve chances for treatment success (C).
- Practice improvement efforts can improve health outcomes in depressed African Americans (B).

#### **Abstract**

Objective Recent studies in primary care settings indicate that African Americans face health disparities in the treatment of major depression. We reviewed the literature to find evidence of specific patient, physician, and practice-setting factors related to such barriers.

Data sources We searched for and retrieved articles in Medline (1966–2004) and hand-checked bibliographies to find additional articles that were relevant to the evaluation and treatment of African

**Study selection and data extraction** Two investigators (AKD, MO) independ-

Americans with depression.

ently examined the abstracts retrieved from the literature search, and excluded articles that did not match a predefined search strategy. Two other investigators (HLC, MMW) identified potential articles through bibliographic review. In the extracted set articles, we examined cited barriers to diagnosis and effective management.

Results We found 24 articles that fulfilled our criteria. These studies indicate that African Americans face a number of barriers in the recognition and treatment of major depression including clinical presentation with somatization, stigma about diagnosis, competing clinical demands of comorbid general medical problems, problems with the physician-patient relationship, and lack of comprehensive primary care

**Conclusions** Research indicates that African Americans who have depression may be frequently under diagnosed and inadequately managed in primary care as a result of patient, physician, and treatment-setting factors. Our systematic review can assist family physicians in understanding how to overcome such barriers to the diagnosis and treatment of depressive disorders in African American patients.

#### CORRESPONDENCE

Myrna M. Weissman, Ph.D. Columbia University College of Physicians and Surgeons, 1051 Riverside Drive, New York, NY 10032. E-mail: mmw3@columbia.edu

frican Americans depend on quality mental health services in primary care more so than whites, since they are more likely to seek care in this setting. However, accumulating evidence shows that African Americans in primary care settings face disparity in recognition and treatment of depression (see Race and mental health treatment: the divide). 1-5 Until now, the specific factors leading to this disparity have not been well described. 16

In this article—a systematic review of studies on the evaluation and treatment of depression in African American patients—we draw attention to factors regarding patients, physicians, and clinical settings that raise barriers to diagnosis and treatment. We also recommend strategies to break through these barriers.

# Assumptions that mask disparities

Disparities may not be apparent to health-care providers in part because community-based epidemiologic studies report that African Americans have a lower rate of major depression than whites.<sup>5,17–19</sup> In primary care settings specifically, the prevalence of major depression among African Americans appears to be lower than for white or Hispanic Americans, mirroring rates in national and community studies.<sup>20</sup> Explanations for this relatively low prevalence of depression have included attributes of the African American experience, such as strong religious beliefs and community ties.

Moreover, according to analyses of data from the National Comorbidity Study, which included an examination of attitudes toward mental health services, African Americans with major depression are more likely to report that they would "definitely go" for mental health services than would whites.<sup>21</sup>

**High-risk populations overlooked.** Community-based studies, however, do not fully capture the mental health needs of African Americans, a large number of

#### Race and mental health treatment: the divide

acial disparity in mental health treatment is a difference across racial groups not justified by underlying differences in mental health status or patient treatment preferences. The reasons are numerous. Compared with whites, for example, African Americans are more likely to be poor, uninsured, or have restrictive insurance policies, 6,7 and to have limited means of transportation to reach health services. But even after controlling for differences in insurance and socioeconomic status, African Americans are less likely than whites to use outpatient mental health services, 9,10 and they therefore face disparities in quality of care. 11,12 Thus, economic factors and illness severity do not fully account for the observed racial differences in the rate and quality of treatment of mental disorders.

Racial disparities may also emerge in the decisions physicians make in caring for patients. In several clinical contexts, members of minorities have received less and inferior care than white patients. <sup>13,14</sup> In one epidemiologic study, African Americans were reported to receive less access to mental health care and to have greater unmet needs for mental health care than whites. <sup>11</sup> Because differences in access to care can have consequences for health outcomes, reducing health care disparities is a widely shared goal of clinical and public health care policy. <sup>15</sup>

whom are in high-risk populations excluded from community epidemiologic studies of mental disorders. Studies of these populations show high rates of major depression and other mental disorders, due to factors including alcohol and substance use disorders, poor physical health, and poverty and homelessness.

An unsettling irony. For emotional distress, African Americans are more likely to seek help from primary care clinicians than from specialty mental health providers.<sup>22-24</sup> However, in primary care, depression in African Americans is less likely to be detected than it is in whites.<sup>3</sup>

In a nationally representative sample, African Americans have been found less likely than whites to receive effective care for depression in primary care. 12,25,26 In a study of Medicaid recipients who had been diagnosed with major depression, African Americans less often received antidepressant medications than did

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One study found that physician characteristics influenced diagnosis, but patient attributes did not

whites.<sup>27</sup> Such disparities in pharmacologic treatments were also found in another study of African American patients in primary care, using data from the National Ambulatory Medical Care Surveys.<sup>24</sup>

# ■ Search methods Data sources

We systematically searched for and retrieved articles in Medline (January 1966 to December 2004) using the MeSH (medical subject heading) terms African Americans and depressive disorder along with the MesH terms adult or adolescent. We refined our search results using the MeSH terms diagnosis, comorbidity, physician-patient relations, patient satisfaction, and patient acceptance of health care to focus on patient and physician factors.

To search for factors related to practice setting, we refined our initial search strategy with the MeSH terms *primary health care*, *family practice*, and *health services*. We also hand-checked bibliographies to find potential articles.

# Study selection and data extraction

Two investigators (AKD, MO) independently reviewed abstracts of the articles retrieved and excluded articles that did not fulfill the criteria to be relevant to the topic of depression in African American patients. Articles were excluded if they did not focus on US populations, African Americans, depressive disorders, and clinical settings, or if they did not report original data. Differences between the 2 reviewers were resolved through consensus after full-text review of the article.

Additional articles were defined by 2 other investigators (HLC, MMW) who provided peer review and identified potential articles in bibliographies. For each article, we classified the barriers described as related to diagnosis, management, or both and to patient, physician, and treatment-setting factors.

#### Results

The initial search using the MeSH terms African Americans and depressive disorder with adult or adolescent returned 156 articles. We found a total of 73 unique articles by refining our Medline search with additional MeSH terms. Of these publications, 12 fulfilled our criteria as relevant to the topic of diagnosing and managing depression in African American patients.

Our hand-checking of bibliographic references found an additional 12 articles that met our relevancy criteria. We examined each of the 24 articles (TABLE 1) to determine the types of barrier studies and whether the factor was related to the detection of depression, its management, or both.

#### Discussion

#### **Barriers in evaluation**

Research on depression in African Americans can be analyzed in terms of attributes of the provider, patient, and practice setting.

Provider attributes. The race of the physician has been linked to the diagnosis of depression in African-American patients, but studies of this factor have yielded conflicting results. McKinlay and colleagues used videotaped cases of depressed patients presented to 128 physicians to examine whether diagnosis was affected by physician characteristics (age, gender race, and medical specialty), patient characteristics (age, gender, race, and socioeconomic status), or their combination.37 They found that physician characteristics affected the diagnosis of depression, but that patient attributes did not. In particular, white primary care physicians were twice as likely as African American physicians to diagnose depression. Since approximately 1 in 5 African American patients seeks care from a physician of their own race,47 such differences may influence the overall rate of recognition in primary care. However, data from the Medical Outcome Study, which included

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# Physician communication style may affect ability to diagnose depression

#### TABLE 1

## Selected studies on managing depression in African Americans

AUTHOR	SAMPLE (% AFRICAN AMERICAN)	STUDY OUTCOMES	MAJOR FINDINGS
Borowsky et al <sup>3</sup>	19,309 adult primary care patients (13%)	Detection of a mental health problem by internists and family physicians	African American patients who have major depression have a lower rate of being detected than their white counterparts
Brown et al <sup>28</sup>	272 depressed adult primary care patients (44%)	Differences in clinical characteristics, health impairments, health beliefs, stressful life events, and social support between African American and white subjects enrolled in a clinical trial of depression	In comparison to white persons, African Americans are more likely to experience somatization, greater health impairment, greater perception of less control of their health status and greater number of stressful life events in the previous 6 months
Brown et al <sup>29</sup>	160 depressed adult primary care patients (43%)	Differences in treatment outcomes from a clinical trial of standardized psychotherapy and pharmacotherapy	Both African American and white patients are effectively treated by psychotherapy and antidepressant medications, but African American subjects have poorer outcome in physical functioning
Brown et al <sup>30</sup>	865 adult African American persons from a community sample (100%)	Rate of major depression compared with demographic, sociocultural, familial background, and health-related risk factors	The strongest predictors of major depression are self-reported poor or fair physical health and being 20 to 29 years of age
Cooper et al <sup>31</sup>	829 depressed adult primary care patients (12%)	Attitudinal measures of acceptability of antidepressant medication and individual counseling	African Americans are less likely than white persons to find antidepressant medication acceptable
Cooper-Patrick et al <sup>23</sup>	1816 adult primary care patients (45%)	Patients' ratings of physicians participatory decision making style	African American patients rate their visits as less participatory than their white counterparts and race-concordant patient-physician relationships are more participatory than race-discordant relationships
Cooper-Patrick et al <sup>32</sup>	Focus group consisting of 16 patients with a recent episode of depression (50%)	16 categories of comments regarding treatment of depression were identified from audiotaped discussions	African American patients provided more comments about spirituality and stigma and were less concerned with the relation between physical health and depression than white patients
Dunlop et al <sup>s</sup>	7690 subjects aged 54 to 65 years from national probability sample (17%)	Rates of major depression with socio demographic characteristics, self-reported health needs, functional limitations, and economic resources as explanatory variables	African Americans have a greater rate of major depression compared to whites, but have a significantly lower rate after adjustments for health needs (such as comorbid physical problems) and economic access (such as income and health insurance)
Fabrega et al <sup>33</sup>	5198 adult community mental health center patients (16%)	Rates of major depression and comorbid psychiatric diagnoses	African Americans have a higher rate of comorbid major depression and substance-use disorders than their white counterparts
Ford et al <sup>34</sup>	Community-based sample of 7092 adults who had a mental health or substance abuse problem and received care in nonpsychiatric settings (29%)	Patient self-reported discussion of a mental health problem or problem with alcohol or drugs	No significance differences between the rates of African Americans and whites who had discussed emotional or mental health problems with their physicians
Grant et al³⁵	National probability sample of adult non- institutionalized US population (NR)	Rates of major depression and alcohol use disorders stratified by demographic variables	The association between alcohol abuse and major depression was greater among African Americans than among non-African Americans

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#### TABLE 1

## Selected studies on managing depression in African Americans

AUTHOR	SAMPLE (% AFRICAN AMERICAN)	STUDY OUTCOMES	MAJOR FINDINGS
Hanson et al <sup>s6</sup>	60 adult patients undergoing psychiatric evaluation (50%)	Congruence between physicians' and patients' ratings of depression during an intake assessment	Concordance of symptoms ratings is lower between white psychiatrists and African American patients than with white psychiatrists and white patients
McKinlay et al <sup>37</sup>	128 primary care physicians (25%)	Diagnostic assessment of videotaped patient presentations of depression and another medical condition	Demographic attributes of patients did not affect diagnostic accuracy, and white physicians were almost twice as likely as their African American counterparts to diagnose depression correctly
Miranda et al <sup>ss</sup>	205 adult public-sector gynecologic patients (30%)	Rates of psychiatric disorders along with extent of primary care services and perception of communication with primary care provider	In a largely minority (82%) patient population (with no reported differences among racial/ethnic groups), 1 out of 5 patients endorsed major depression and fewer than half had access to comprehensive primary medical services
Miranda et al <sup>∞</sup>	1269 adult primary care patients (7%)	Clinical outcome, appropriateness of care, and employment for patients enrolled into a clinical trial of 2 quality improvement interventions with modest adaptation to minority patients	African American patients, in contrast to their white counterparts, experienced a significant decrease in probable depression from baseline
O'Malley et al <sup>₄</sup>	Population-based sample of 1202 women (83%)	Rates of care of depression, extent of primary care services, quality of physician-patient relationship	In a largely African American sample (with no reported differences between racial/ethnic groups), comprehensive primary care delivery (including counseling) and self-reported view of physician as respectful are associated with physician inquiry and treatment of depression
Rollman et al"	204 adult primary care patients (25%)	Processes of depression care and patient outcome following screening and treatment recommendations to physicians	No differences in treatment patterns and outcomes were found between white and African American patients, except for increased rate of documented counseling by physicians among whites
Sleath et al <sup>42</sup>	508 adult outpatients (NR)	Patient expression of symptoms from audiotaped medical encounter and physician perception of health from survey	Among all factors, only patient expression of emotional symptoms among African American patients influenced psychotropic prescribing
Steffens et al <sup>43</sup>	113 patients age 60 years or older (11.5%)	Annual rate of enrollment into a geriatric depression research program based on race and ethnicity	Active community outreach and enrollment increased representation of African Americans by threefold over a 2-year period
Sussman et al¹	3004 adult subjects from a community- based sample (38%)	Treatment seeking behavior for subjects who have current depression	African Americans are less likely to seek care for depression than whites, with African Americans reporting greater fear of treatment and of being hospitalized than whites
Van Hook⁴	321 adult women in primary care settings (22%)	Rate of major depression and reported barriers to treatment	In a multi-ethnic sample (with no reported differences among racial/ethnic groups), commonly reported barriers to seeking help included stigma and perceived separation of primary care and specialty mental health services
Wells et al⁴⁵	9585 adult national survey respondents (28%)	Access to treatment for alcoholism, drug abuse and, mental health care; unmet need for care; satisfaction with care and use of active treatment in the prior year	Among those with perceived need for mental health services, African Americans were more likely to report no access to care than whites and less likely to receive active treatment
Wohl et al⁴⁵	20 matched adult depressed African American and white patients (50%)	Symptom pattern and severity of depression	No difference in symptom severity was found between African Americans and whites, and Africa Americans were more likely to experience diurnal variation in their depression

demographic characteristics on 349 primary care physicians, did not find that the race of the physician influenced the detection of depression.<sup>3</sup>

In addition to physician demographic factors, physician communication style may affect ability to diagnose depression. Appropriate diagnosis and treatment of depression depends to a great extent on verbal communications between patient and provider about the nature, extent, severity, and consequences of symptoms. Problems with communication may lead to misunderstandings, misdiagnosis, inappropriate treatments, and premature termination of treatment. An analysis of patient-physician encounters indicates that physicians may be more likely to minimize emotional symptoms of African American than of whites.42 Relative to whites, African Americans are more likely to rate their visits with white physicians as less participatory.

This difference is overcome when African Americans see physicians of their own race.23 In a population-based study among largely low-income African American women, primary care physicians who were rated as showing more respect by the participants were more likely to inquire about depressive symptoms during a clinical visit.40 Thus, despite the fact that African American patients rate their encounters more satisfying and are more likely to disclose their problems to African American physicians, white physicians appear to diagnose depression more commonly in their African American patients. Clearly, more work is needed to clarify this seeming contradiction.

Patient attributes. During the primary care encounter, African Americans are as likely as whites to discuss mental health problems.<sup>34</sup> However, African Americans may be more likely to exhibit somatic and neurovegetative symptoms of depression than mood or cognitive symptoms,<sup>33,36</sup> which may complicate detection and diagnosis.

A recent national survey suggests that

depression in African Americans may be commonly masked by self medication and somatic symptoms and so may pass undetected in primary care.<sup>48</sup> In a randomized clinical trial of depression treatment in primary care, depressed African American subjects were more likely than white subjects to have symptoms of poor physical health and pain and to have somatization.<sup>29</sup> However, another study found few differences between whites and African Americans in symptom presentation of depression when comorbid disorders and sociodemographic factors were controlled.<sup>46</sup>

Do primarily somatic presentations of depression reduce physicians' ability to accurately diagnose major depression in racial and ethnic minorities? This question has not been studied, though coexisting medical problems in primary care populations have been found to impede the diagnosis of depression, <sup>49</sup> presumably by competing for the physician's attention. <sup>3,50</sup> In a variety of medical contexts, known medical disorders are associated with under-treatment of unrelated disorders. <sup>51</sup>

Practice-setting attributes. No studies have examined whether specific practice setting factors, such as insurance coverage, are related to the low detection rate of major depression. Among low-income women of multiethnic backgrounds attending primary care clinics, Van Hook found that perceived separation of primary care services and specialty mental health care was a self-reported barrier to seeking help for depression.<sup>44</sup>

The Surgeon General's report documents the overall poor access to general medical services faced by African Americans. They are more likely to receive health care in outpatient hospital and emergency departments, and their mental health services are also characterized by high rates of emergency care. As a result, they are less likely to receive the continuity of treatment provided in primary care, which may allow better detection of depression.<sup>15</sup>

#### **FAST** TRACK

Assess patients' feelings about the stigma of depression and acceptability of antidepressants

#### **Barriers to effective management**

Research on the potential causes of disparities in treatment for African American patients in primary care has examined a variety of provider, patient, and practice-setting factors.

Provider attributes. Physician communication style may not only influence diagnosis but also a decision to treat. In a study that analyzed audiotaped communication between patients and primary care providers during clinic visits, the tendency of physicians to minimize emotional expression by African Americans, relative to whites, led to lower prescribing of antidepressant medication among African Americans.<sup>42</sup> Further research is needed to understand why such communication styles exist between primary care providers and African American patients.

Patient attributes. A number of patient attributes have been examined that may explain the lower rate of mental health services provided in primary care. Significant research has been undertaken on African American attitudes toward and beliefs about mental health treatments. Cooper-Patrick and colleagues conducted focus groups for African American and white patients as well as health care professionals. In questions related to depression and treatment preferences, African American patients expressed more concerns about stigma and spirituality than did white patients.<sup>32</sup>

In related research, a survey of African American patients recruited from primary care offices indicated they were less likely to find antidepressant medication acceptable than white patients in primary care.<sup>31</sup> Such attitudinal differences may explain why African Americans use antidepressants less commonly than whites, even when primary care physicians make similar recommendations for both groups.<sup>52</sup> As yet unstudied is the extent to which sensational reports about antidepressant side effects may cause persons already skeptical about the care they receive to discontinue treatment.

Another reason African Americans

may avoid or discontinue antidepressant treatment is that they tend to tolerate certain classes of psychotropic medications poorly. Strickland and colleagues found that African Americans are more likely than whites to be "poor metabolizers" of tricyclic antidepressants.<sup>53</sup> African Americans treated with tricyclic antidepressants will therefore experience higher plasma levels per dose than whites, and an earlier onset of action. African Americans are also more likely to experience side effects, which may lead to treatment nonadherence.

Few studies have examined the tolerability of newer class of antidepressant medications, such as selective serotonin reuptake inhibitors (SSRIs), for African Americans. More research is required to determine whether antidepressant side effects or other experiences with psychotropic medications are a reason for the lower rates of antidepressant use among African American patients in primary care. Educating patients about antidepressants, their onset of action, and side effects may reduce some of these barriers and prevent early discontinuation of antidepressant therapy.<sup>54</sup>

Poverty and its associated psychosocial factors may also contribute to the lower quality of mental health care among African Americans. Miranda and colleagues found this to be so for African American women receiving primary care in obstetric-gynecologic clinics.<sup>47</sup> They have argued that clinical case management is needed as a component of effective mental health treatment for primary care patients who are poor and likely to face significant negative life events.

Practice-setting attributes. Few practice-setting factors have been examined in relationship to the disparities in depression treatment faced by African Americans. O'Malley and colleagues examined whether primary care physicians who were evaluated as having comprehensive medical services by low-income African American women were more likely to provide treatment

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Consider teaching nurse assistants to educate, assess, and help follow-up with depressed patients for depression.<sup>40</sup> Comprehensiveness was determined by the ability to meet all health needs, thoroughness of physical exam, and provision of counseling and screening services. In a survey study, they found that comprehensiveness of medical services was correlated to being asked about and being treated for depression.

#### Interventions in primary care

Concerted efforts to improve quality of care can reduce the mental health burden of undetected depression for African Americans as well as other ethnic and racial groups. African American and white primary care patients both appear to respond equally to standardized psychotherapy and pharmacotherapy for major depression.<sup>29</sup>

In a randomized control trial to improve the quality of depression management in primary care, no significant differences existed between white and African American participants in the process of depression care or clinical outcomes, although both groups had less than optimal recovery rates.41 One randomized clinical trial included modified interventions to target the mental health needs of low-income minority primary care patients. The interventions included educating clinicians about depression; teaching nurses to educate, assess, and follow-up depressed patients; and making cognitive behavioral therapy available. Patients and physicians selected the treatment. Modification for minority patients was modest and included translations and cultural training for clinicians.

Using these approaches, African American participants were more likely than whites to have better depression outcome at 6 and 12 months.<sup>39</sup> These studies indicate that both general interventions to depression care and small modifications for minority patients can lead to improved health outcomes among African American patients.

It may be unreasonable to believe that simply seeking to improve the primary care assessment and treatment of

#### TABLE 2

# Recommendations for addressing barriers to the detection and treatment of depression in the African American patient

#### **IMPROVING DIAGNOSIS**

Assess stigma toward mental health problems for patients suspected to have depression

Inquire about patient's experience of somatic symptoms and their relationship to depression, life stressors, and social conflicts

Maintain a respectful, open stance in understanding patient's style of coping with depressive symptoms, including use of spirituality

Evaluate the presence of comorbid mental health problems, such as alcohol abuse, that require different treatment approaches

#### PROVIDING EFFECTIVE MANAGEMENT

Determine the patient's preferences for psychotherapy and pharmacotherapy, and provide treatment referrals for counseling if appropriate and as resources permit

Educate patients about antidepressant medications, their onset of action, and side effects

At each visit after initiation of depression management, check for regular adherence to pharmacotherapy or to referred psychotherapy

Assist patients who cannot maintain regular visits for depression care to find strategies that can overcome social or financial barriers

depression in African Americans will eliminate racial differences in the health outcomes of depressed adults. Reform is also clearly needed in health care financing and in broader social welfare policy as it affects the lives of depressed minority populations. However, primary care providers who are aware of the risk of racial disparities in the recognition and treatment of depression and work to provide treatments that are tailored to the individual's needs can help to reduce the significant burden of depression (TABLE 2).

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#### REFERENCES

- Sussman LK, Robins LN, Earls F. Treatment-seeking for depression by black and white Americans. Soc Sci Med 1987; 24:187–196.
- Vega WA, Kolody B, Aguilar-Gaxiola S, Catalano R. Gaps in service utilization by Mexican Americans with mental health problems. Am J Psychiatry 1999; 156:928–934.
- Borowsky SJ, Rubenstein LV, Meredith LS, Camp P, Jackson-Triche M, Wells KB. Who is at risk of nondetection of mental health problems in primary care? J Gen Intern Med 2000; 15:381–388.
- Fiscella K, Franks P, Doescher MP, Saver BG. Disparities in health care by race, ethnicity, and language among the insured: findings from a national sample. Med Care 2002; 40:52–59.
- Dunlop DD, Song J, Lyons JS, Mannheim LM, Chang RW. Racial/ethnic differences in rates of depression among pre-retirement adults. Am J Public Health 2003; 93:1945–1952.
- Phillips KA, Mayer ML, Aday LA. Barriers to care among racial ethnic groups under managed care. Health Aff 2000; 19:65–75.
- Tai-Seale M, Freund D, LoSasso A. Racial disparities in service use among Medicaid beneficiaries after mandatory enrollment in managed care: a differencein-differences approach. *Inquiry* 2001; 38:49–59.
- Heckman TG, Somlai AM, Peters J, et al. Barriers to care among persons living with HIV/AIDS in urban and rural areas. AIDS Care 1998; 10:365–375.
- Padgett DK, Patrick C, Burns BJ, Schlesinger HJ. Ethnicity and the use of outpatient mental health services in a national insured population. Am J Public Health 1994; 84:222–226.
- Swartz MS, Wagner HR, Swanson JW, Bruns BJ, Keorge LK, Padgett DK. Comparing use of public and private mental health services; the enduring barriers of race and age. Commun Ment Health J 1998; 34:132-144
- Wells K, Klap R, Koike A, Sherbourne C. Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. Am J Psychiatry 2001; 158:2027–2032.
- Wang PS, Berglund P, Kessler RC. Recent care of common mental disorders in the United States. J Gen Intern Med 2000; 15:284–292.
- Bach P, Cramer L, Warren L, Begg C. Racial differences in the treatment of early-stage lung cancer. New Engl J. Med 1999: 341:1198–1205
- Peterson ED, Shaw L, DeLong E, Pryor D, Califf R, Mark D. Racial variation in the use of coronaryrevascularization procedures—are the differences real? Do they matter? N Engl J Med 1997; 336:480–486.
- US Department of Health and Human Services. Mental Health: Culture, Race, and Ethnicity: A Supplement to Mental Health: A Report of the Surgeon General. Rockville, Md: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, 2001.
- Areán PA, Alvidrez J. Treating depressive disorders: who responds, who does not respond, and who do we need to study? J Fam Pract 2001; 50:E2.
- Kessler RC, McGonagle KA, Zhao S, et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. Arch Gen Psychiatry 1994; 51:8-19
- Zhang AY, Snowden LR. Ethnic characteristics of mental disorders in five US communities. Cult Div Ethnic Minority Psychology 1999; 5:134–146.

- Kessler RC, Berglund P, Demler O, et al; National Comorbidity Survey Replication. The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *JAMA* 2003; 289:3095–3105.
- Olfson M, Shea A, Feder A, et al. Prevalence of anxiety, depression, and substance use disorders in an urban general medicine practice. Arch Fam Med 2000; 57:675–682.
- Diala CD, Muntaner C, Walrath C, Nickerson K, LaVeist T, Leaf P. Racial/ethnic differences in attitudes toward seeking professional mental health services. Am J Public Health 2001; 91:805–807.
- Cooper-Patrick L, Gallo JJ, Gonzales JJ, et al. Race, gender, and partnership in the patient-physician relationship. *JAMA* 1999; 282:583–589.
- Gallo JJ, Marino S, Ford D, Anthony J. Filters on the pathway to mental health care II: sociodemographic factors. *Psychol Med* 1995; 25:1149–1160.
- Snowden LR, Pingitore D. Frequency and scope of mental health delivery service to African Americans in primary care. Ment Health Serv Res 2002: 4:123–130.
- Harman JS, Schulberg HC, Mulsant BH, Reynolds CF. The effect of patient and visit characteristics on diagnosis of depression in primary care. J Fam Pract 2001; 50:1068.
- Young AS, Klap R, Sherbourne CD, Wells KB. The quality of care for depressive and anxiety disorder in the United States. Arch Gen Psychiatry 2001; 52:472–478.
- Melfi CA, Croghan TW, Hanna MP, Robinson RL. Racial variation in antidepressant treatment in a Medicaid population. J Clin Psychiatry 2000; 16:16–21.
- Brown C, Schulberg HC, Madonia MJ. Clinical presentations of major depression by African Americans and Whites in primary medical care practice. *J Affect Disord* 1996; 41:181–191.
- Brown C, Schulberg HC, Sacco D, Perel JM, Houck PR. Effectiveness of treatments for major depression in primary medical care: a post hoc analysis of outcomes for African Americans and White patients. J Affect Disord 1999: 53:185–192.
- Brown DR, Ahmed F, Gary LE, Milburn NG. Major depression in a community sample of African Americans. Am J Psychiatry 1995; 152:373–378.
- Cooper LA, Gonzales JJ, Gallo JJ, et al. The acceptability of treatment for depression among African-American, Hispanic, and white primary care patients. Med Care 2003; 41:479–489.
- Cooper-Patrick L, Powe NR, Jenckes MW, Gonzales JJ, Levine DM, Ford DE. Identification of patient attitudes and preferences regarding treatment of depression. J Gen Intern Med 1997; 12:431–438.
- Fabrega H Jr, Mezzich J, Ulrich RF. Black-white differences in psychopathology in an urban psychiatric population. Compr Psychiatry 1988; 29:285–297.
- Ford DE, Kamerow DB, Thompson JW. Who talks to physicians about mental health and substance abuse problems? J Gen Intern Med 1988; 3:363–369.
- Grant BF, Harford TC. Comorbidity between DSM-IV alcohol use disorders and major depression: results of a national survey. *Drug Alcohol Depend* 1995; 39:197–206.
- Hanson B, Klerman GL. Proceedings: Interracial problems in the assessment of clinical depression: concordance differences between white psychiatrists and black and white patients. *Psychopharmacol Bull* 1974; 10:65–67.
- McKinlay JB, Lin T, Freund K, Moskowitz M. The unexpected influence of physician attributes in clinical decisions: results of an experiment. J Health Soc Behavior 2002; 43:92–106.

#### **FAST** TRACK

## Black patients experience higher plasma levels of tricyclics than do whites

# Depression in African Americans: Breaking the barriers

- Miranda J, Azocar F, Komaromy M, Golding JM. Unmet mental health needs of women in public-sector gynecologic clinics. Am J Obstet Gynecol 1998; 178:212–217.
- Miranda J, Duan N, Sherbourne C, et al. Improving care for minorities: Can quality improvement interventions improve care and outcomes for depressed minorities? results of a randomized, controlled trial. Health Serv Res 2003; 613–630.
- O'Malley AS, Forrest CB, Miranda J. Primary care attributes and care for depression among low-income African American women. Am J Public Health 2003; 93:1328–1334.
- Rollman BL, Hanusa BH, Belnap BH, Gardner W, Cooper LA, Schulberg HC. Race, quality of depression care, and recovery from major depression in a primary care setting. Gen Hosp Psychiatry 2002; 24:381–390.
- Sleath B, Svarstad B, Roter D. Patient race and psychotropic prescribing during medical encounters. Patient Educ Couns 1998; 34:227–238.
- Steffens DC, Artigues DL, Ornstein KA, Krishnan KR. A review of racial differences in geriatric depression: implications for care and clinical research. J Natl Med Assoc 1997; 89:731–736.
- Van Hook MP. Women's help-seeking patterns for depression. Soc Work Health Care 1999; 29:15–34.
- Wells K, Klap R, Koike A, Sherbourne C. Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. Am J Psychiatry 2001; 158:2027–2032.
- Wohl M, Lesser I, Smith M. Clinical presentations of depression in African Americans and white outpatients. Cult Div Ment Health 1997; 3:279–284.
- LaVeist TA, Carroll T. Race of physician and satisfaction with care among African-American patients. J Natl Med Assoc 2002; 94:937–943.
- Jackson JS. Race and ethnic differences in physical and mental health disparities. University of Michigan Institute for Social Research, Program for Research on Black Americans. Presented at New York State Psychiatric Institute, New York, NY, February 2004.
- Knauper B, Wittchen HU. Diagnosing major depression in the elderly: evidence for response bias in standardized diagnostic interviews? J Psychiatr Res 1994; 28:147–164.
- Nutting PA, Rost K, Smth J, Weiner JJ, Elliot. Competing demands from physical problems: effect on initiating and completing depression care over 6 months. Arch Fam Med 2000; 9:1059–1064.
- Redelmeier DA, Tan SH, Booth GL. The treatment of unrelated disorders in patients with chronic medical diseases. N Engl J Med 1998; 338:1516–1520.
- 52. Miranda J, Cooper LA. Disparities in care for depression among primary care patients. *J Gen Intern Med* 2004: 19:120–126.
- Strickland TL, Stein R, Lin K, Risby E, Fong R. The pharmacologic treatment of anxiety and depression in African Americans. Arch Fam Med 1997; 6:371–375.
- Bull SA, Hu XH, Lee JY, Ming EE, Markson LE, Fireman. Discontinuation of use and switching of antidepressants: influence of patient-physician communication. JAMA 2002: 288:1403–1409.



## Evidence-based medicine ratings

THE JOURNAL OF FAMILY PRACTICE uses a simplified rating system called the Strength of Recommendation Taxonomy (SORT). More detailed information can be found in the February 2003 issue, "Simplifying the language of patient care," pages 111–120.

Strength of Recommendation (SOR) ratings are given for key recommendations for readers. SORs should be based on the highest-quality evidence available.

- A Recommendation based on consistent and good-quality patient-oriented evidence.
- B Recommendation based on inconsistent or limited-quality patient-oriented evidence.
- C Recommendation based on consensus, usual practice, opinion, disease-oriented evidence, or case series for studies of diagnosis, treatment, prevention, or screening

Levels of evidence determine whether a study measuring patient-oriented outcomes is of good or limited quality, and whether the results are consistent or inconsistent between studies.

#### STUDY QUALITY

- 1—Good-quality, patient-oriented evidence (eg, validated clinical decision rules, systematic reviews and meta-analyses of randomized controlled trials [RCTs] with consistent results, high-quality RCTs, or diagnostic cohort studies)
- 2—Lower-quality patient-oriented evidence (eg, unvalidated clinical decision rules, lower-quality clinical trials, retrospective cohort studies, case control studies, case series)
- **3**—Other evidence (eg, consensus guidelines, usual practice, opinion, case series for studies of diagnosis, treatment, prevention, or screening)

#### Consistency across studies

Consistent—Most studies found similar or at least coherent conclusions (coherence means that differences are explainable); *or* If high-quality and up-to-date systematic reviews or meta-analyses exist, they support the recommendation

**Inconsistent**—Considerable variation among study findings and lack of coherence; *or* If high-quality and up-to-date systematic reviews or meta-analyses exist, they do not find consistent evidence in favor of the recommendation