

# Disproportionate Use of Psychiatric Emergency Services by African Americans

Lonnie R. Snowden, Ph.D.

Ray Catalano, Ph.D.

Martha Shumway, Ph.D.

**It is well documented that African Americans receive a disproportionate share of their mental health care in the emergency room. Yet this disparate and undesirable pattern of service use has been inadequately examined and remains poorly understood. The disparity is often attributed to lack of access to outpatient care and to the low quality of available services, but these explanations represent untested hypotheses. This Open Forum reviews available data to illustrate how African Americans and white Americans are differentially affected by a broad range of social and community processes and trends, including characteristics of mental health systems and communities and changing societal conditions, and describes how these differences can lead to African Americans' disproportionate use of psychiatric emergency services. Investigation of several hypotheses could contribute to a comprehensive explanation of disparities in psychiatric emergency services use. Such an explanation will enable formulation and testing of strategies to reduce disparities in access to and quality of mental health care. (*Psychiatric Services* 60:1664–1671, 2009)**

*Dr. Snowden and Dr. Catalano are affiliated with the School of Public Health, University of California, Berkeley, 235 University Hall, Berkeley, CA 94720 (e-mail: snowden@berkeley.edu). Dr. Shumway is with the Department of Psychiatry, University of California, San Francisco.*

African Americans appear in emergency rooms for mental health problems in numbers well out of proportion to their representation in the U.S. population at large. African Americans' overrepresentation in emergency services is longstanding and robust; it has not been significantly affected by structural changes in the mental health system, including the decline in inpatient treatment populations, the introduction of more effective treatments, or the advent of managed care. Its endurance suggests that African-American overrepresentation in emergency services is unlikely to disappear on its own.

Disproportionate use of emergency services is one of many disparities in health and mental health care documented in comprehensive reviews conducted by the U.S. Surgeon General (1), the Institute of Medicine (IOM) (2), and the President's New Freedom Commission on Mental Health (3). However, African Americans' overuse of psychiatric emergency services differs from other health and mental health care disparities in ways that merit focused attention. When mental health service use is examined in aggregate, members of all racial-ethnic minority groups use such services less frequently than do whites (4,5). Yet available evidence indicates that African Americans use psychiatric emergency services much more frequently than whites and much more frequently than members of other racial-ethnic minority groups, such as Asian Americans and Latinos (6,7)—perhaps because limited English proficiency, fear of deportation,

and specific cultural beliefs and values deter Asians and Latinos from emergency services use in particular.

Receipt of emergency care in preventable emergencies and in situations that are not emergencies is undesirable and, according to the broad definition used by the Agency for Healthcare Research and Quality in the *National Healthcare Disparities Report* (8), the African-American-white differential counts as a health care disparity. According to a more restrictive definition of "disparity" offered by the IOM (2), however, disparities are limited to treatment differences between minority populations and the white population that are not explained by corresponding differences in health status. African Americans' greater use of psychiatric emergency services does not appear to be justified on grounds of greater need for treatment among African Americans because epidemiologic reports indicate that African Americans experience somewhat lower, not higher, levels of mental illness than white Americans (9,10).

Psychiatric emergency service use is of particular interest because of the multiple special roles that these services play in mental health systems. At a system level, emergency service use is a key indicator of mental health service system performance, and high utilization is seen as a marker of poor-quality care (6,11). At an individual level, psychiatric emergency services are an integral triage point for persons being evaluated for involuntary commitment because they are considered gravely disabled or a danger to themselves or others. Even in the absence of invol-

untary commitment, a visit to the emergency room is a gateway to psychiatric hospitalization. These triage processes are of considerable relevance in understanding African Americans' mental health service utilization because African Americans are overrepresented among persons subject to involuntary commitment (1,12) and among persons admitted for inpatient psychiatric hospitalization (13).

Because African Americans' distinctive overrepresentation in the psychiatric emergency room has been repeatedly documented, policy makers, researchers, and clinicians have tended to assume that the causes of this problematic utilization pattern are equally well documented. Yet the issue has not been systematically studied. In fact, there is little empirical literature that explains African-American-white disparities in use of emergency care and that can guide the search for remediation through policy or clinical practice. A PubMed search conducted in February 2009 using the Medical Subject Heading terms "African Americans," "blacks" and "emergency services, psychiatric" yielded only 14 published papers, only four of which were published in the past ten years (7,14–26). All the studies were cross-sectional and descriptive, and among the handful that proposed hypotheses, none directly tested whether differences between African Americans and whites actually explained the disparity in emergency services use.

In the absence of knowledge about why disparities occur in use of the emergency room, our intent is to encourage further explanatory research into this important but little-studied problem by suggesting hypotheses for future research. We pursued this aim by using available evidence to formulate hypotheses that can explain African-American-white differences in emergency service use. We consider our hypotheses reasonable in light of current knowledge, but we do not consider them to be ours alone or believe that they exhaust the list of worthy possibilities. We readily acknowledge that our hypotheses represent only one source of insight into the problem, and we

hope to encourage readers to refine and test these hypotheses as well as hypotheses of their own.

To pursue our objective, we identified variables on which African Americans and whites differ and which are also linked, either directly or indirectly, to psychiatric crises and other circumstances that might result in emergency intervention. To put it another way, and using a widely accepted explanatory framework, we propose mediating and moderating variables (27) that identify how being African American translates into being exposed more often than white Americans to conditions that promote greater use of psychiatric emergency services.

Most of our hypotheses invoke mediators—a condition in which African Americans are over- or underrepresented relative to whites and in which the condition in question also is linked to African American's greater likelihood of using psychiatric emergency services. Other hypotheses invoke moderators—conditions in which African Americans' response is greater or less than that of whites and in which this greater or lesser response is linked to African Americans' greater likelihood of using psychiatric emergency services. Mediators and moderators are identified as such in the discussion that follows.

As outlined in the box on this page, our search for explanatory hypothe-

ses begins with the mental health service system but then moves beyond this system to consider factors that may also affect emergency services use, including sociocultural and community factors and changes in social conditions over time that can affect African Americans' use of psychiatric emergency services. For simplicity and consistency with previous work, we use the term "African American"—sometimes using "black" as a synonym—with the understanding that this omnibus term may obscure potentially important differences in cultural identity, differences associated with immigration status, and other important factors.

### **Mental health system characteristics**

#### ***Access to outpatient care***

African Americans' limited access to outpatient mental health care is often thought to explain their overuse of psychiatric emergency services. It is plausible that ongoing outpatient care can avert the need for visiting the emergency room by controlling an individual's underlying behavioral problems and avoiding crises. It is also plausible that outpatient care could divert inappropriate emergency room visitors by triaging the 25%–30% of "nonurgent" visitors to "other, less costly treatment providers" (28). Because African Americans continue to be underrepresented in outpatient treatment and when

---

### ***Categories of explanatory hypotheses for African Americans' overrepresentation in psychiatric emergency services***

#### **Mental health system characteristics**

- Access to outpatient care
- Usual sources of care
- Quality of care

#### **Sociocultural and community characteristics**

- Personal distress in disadvantaged neighborhoods
- Family and network stress in disadvantaged neighborhoods
- Countervailing prosocial trends in disadvantaged neighborhoods
- Lower tolerance for African Americans' disruptive behavior
- African-American communities' greater stigmatizing attitudes

#### **Changing social conditions**

- Economic changes
- Public policy changes
- Other social shifts

treated demonstrate high dropout rates and poor treatment continuity (4,29–33), it is hypothesized that access to and continuity of outpatient care are mediating factors that explain African Americans' overrepresentation in emergency services.

Evidence from the general health care literature suggests that limited access to appropriate outpatient care can lead to excess use of medical emergency services (34). At the mental health service system level, closing an outpatient clinic was shown to lead to increased rates of psychiatric emergency room visits; however, when additional outpatient services were provided, such as mobile crisis care and case management, visits to the emergency room decreased (11). However, this handful of studies provides only limited support for the widely held expectation that usual outpatient mental health treatment averts—that is, substitutes for—emergency care for everyone and provides no direct support for understanding whether African Americans' limited access to outpatient care explains their greater use of emergency services. It is important that we test the hypothesis—and not assume—that African Americans' lower likelihood of receiving outpatient treatment explains their greater use of emergency services.

#### *Usual sources of care*

African Americans' patterns of use of general health care may simultaneously limit access to outpatient mental health services and increase the likelihood of emergency services use. Compared with whites, a greater proportion of African Americans lack a usual source of care (2). Because primary care is an important source of mental health care and an important gateway to specialty mental health services (4,33), African Americans may be more likely than whites to experience mental health crises that necessitate emergency visits because they do not have a trusting, ongoing relationship with a primary care provider who could provide care directly or offer a timely referral to outpatient mental health care. Existing data show that

persons who report a hospital as their usual source of care visit an emergency room for a mental health problem almost twice as often as persons who report a physician as their usual source of care (35). These data suggest a testable hypothesis—that compared with whites, African Americans' greater lack of a stable source of primary medical care may be a mediating factor that explains their greater use of psychiatric emergency care.

African Americans are also more likely than whites to rely on institutions such as hospitals as a usual source of care (2), and in fact, persons reporting a hospital as their usual source of care may be referring to the emergency room itself (36). If a greater proportion of African Americans than white Americans report the medical emergency room as a usual source of health care, then the psychiatric emergency room might also be a more common source of mental health care for African Americans. That African Americans' greater reliance on the psychiatric emergency room as a usual source of care mediates their greater use of emergency care is a promising but untested hypothesis (37).

#### *Quality of care*

African Americans who receive mental health services tend to receive a lower quality of care than do whites, and this disparity in quality may be a mediating factor that accounts for African-American-white differences in rates of emergency room visits (6). One aspect of low-quality care, inaccurate diagnosis, has long been documented. In clinical settings African Americans are more likely to be given a diagnosis of schizophrenia and less likely to be given a diagnosis of an affective disorder than population-based prevalence data would warrant (38–40). A higher rate of incorrect diagnoses among African Americans likely leads to inappropriate and ineffective treatment and to more exacerbations of symptoms, which require more emergency care. It would be useful to examine whether diagnostic inaccuracy is a moderating variable that differen-

tially affects African Americans and contributes to overuse of psychiatric emergency services.

Another quality-of-care indicator to consider is the therapeutic alliance, or the bond developed between client and clinician during treatment (41). Some evidence suggests that African Americans have more negative views about mental health treatment than do whites (42,43), and other evidence suggests that African-American clients can be perceived as overly suspicious and hostile (44). As a result, fewer African-American clients than white clients may form the client-clinician alliance necessary for effective treatment, and emergency services may be needed to address issues that are inadequately managed in the outpatient setting. The hypothesis that disparities in treatment alliance mediate Africans' disparities in use of psychiatric emergency services should be tested.

Appropriateness of prescription practices is another quality-of-care indicator that may mediate disparities in emergency room use. African Americans receive psychotropic medications, especially newer medications that are thought to have fewer side effects, less often than others with comparable diagnoses and treatment need (39,45,46), although it is not yet clear whether these differences in prescription practices are justified by underlying metabolic differences. Because African Americans are more likely to receive older forms of medications that have more side effects and are associated with lower rates of adherence, it may be that medication disparities lead to higher rates of relapse that require more frequent emergency visits.

Thus, as noted above, some evidence supports an explanatory link between African Americans' limited access to high-quality outpatient treatment and their greater use of the psychiatric emergency room; however, a number of more specific hypotheses remain to be tested if we are to understand African Americans' distinct service utilization patterns in sufficient detail to devise interventions that ameliorate prevailing disparities.

## **Sociocultural and community characteristics**

In addition to practitioner behavior and mental health system responsiveness, communities, social networks, and families also likely influence use of the psychiatric emergency room. As discussed in the sections below, evidence suggests that African Americans may be differentially exposed to adverse environmental conditions, including negative community, network, or family influences that could affect emergency room use. Intolerance of disruptive behavior related to mental illness may be greater for African Americans than for whites, which also may result in higher rates of emergency services use. Finally, stigmatizing attitudes toward mental illness, which affect African-American communities especially, also may result in proportionately more trips for emergency care.

### ***Disadvantaged neighborhoods***

*Personal distress.* The importance of considering neighborhood-level effects in explaining disparities in health status (47) and health care (48) has been increasingly recognized. Considerable evidence links residence in disadvantaged neighborhoods that are characterized by social disorganization, crime, and violence and that impose high levels of stress on all community residents with a range of negative health outcomes, including diagnosed mental illness (49–52). In national epidemiologic data, “neighborhood disadvantage” indicators (such as the adult unemployment rate and the percentage of persons with incomes below the poverty line) and residential transience in neighborhoods were found to be associated with elevated rates of psychiatric disorder (53).

Neighborhood disadvantage affects African Americans in particular because they are much more likely than whites to live in disadvantaged neighborhoods characterized by concentrated poverty (54–56). Neighborhood disadvantage has been identified as a mediating factor that explains observed relationships between African-American race and higher levels of mental distress (57).

In turn, higher levels of mental distress in disadvantaged neighborhoods might serve as a mediator of a higher rate of psychiatric emergencies among African Americans and their greater use of psychiatric emergency services. These hypotheses remain to be tested.

*Family and network stress.* Family members and other social network members are also affected by residence in disadvantaged neighborhoods. They are strained and often have very limited emotional and financial resources; thus they may be unable to offer needed support to someone with a mental illness. This lack of support may result in worsening of symptoms and increased need for psychiatric emergency services. For example, family “expressed emotion,” including criticism, hostility, and emotional overinvolvement (58), is known to increase relapse risk among persons with schizophrenia and mood disorders. The hypothesized relationship between African Americans’ greater use of emergency services and their greater likelihood of living in disadvantaged neighborhoods and of experiencing the less supportive family interactions that result could be usefully tested.

*Countervailing prosocial trends.* Although there is considerable evidence that the stresses of neighborhood disadvantage may meaningfully constrain the community supports available to many African Americans, there is contrasting evidence that some African-American communities effectively foster and sustain well-integrated family-, friend-, and church-based networks (59). These positive community factors and connections, operating in conjunction with social norms prescribing inclusiveness and support, might offset vulnerabilities associated with community disadvantage. These factors might act as buffers that favorably moderate the link between stress and emergency services use, such that greater stress on network members does not manifest itself in greater emergency services use. More research is needed to evaluate the balance of stress and support experienced by African-American

caretakers and the role of family members and members of voluntary support networks in explaining excess emergency room use.

### ***General community characteristics***

*Lower tolerance for African Americans’ disruptive behavior.* When community members feel annoyed or threatened by the behavior of an individual with mental illness, they may take direct action, calling the police or public health authorities, who are likely to respond by initiating a psychiatric emergency room visit (37,60). Because community members consider African Americans with mental illness more threatening than whites with mental illness, community members may intervene more often when African Americans are disruptive, subjecting them to emergency intervention for social control.

Some evidence supports this social control hypothesis, suggesting that African-American emergency room visitors are especially likely to have been brought in by the police (61). However, the literature in this area is scant, and more research is needed. Investigators should formulate hypotheses addressing racial-ethnic differences in how community agents recognize and label crisis behaviors and initiate contact with emergency services. In this and other ways, investigators should explicitly test the hypothesis that lower community tolerance for African Americans’ disturbed behavior is a mediating factor that explains their overrepresentation in psychiatric emergency services.

*Greater stigma in African-American communities.* Prevailing attitudes toward mental illness in most African-American communities may also affect psychiatric emergency service use. Stigma related to mental illness occurs throughout society and compromises the recovery prospects of everyone with mental illness. However, there is suggestive evidence that stigma is especially problematic among African Americans. Research shows that African Americans have more negative perceptions of mental illness than whites (62–64)



and about mental health services (65,66). Young African-American and black immigrant women in need of mental health treatment reported higher levels of stigma concerns about mental health treatment than whites and Latinas (67). African Americans who entered mental health treatment reported stigmatizing reactions from members of their communities (68).

Pervasive stigma may limit early use of mental health services, allowing untreated mental health problems to grow in severity until emergency intervention is required. Examination of mental illness stigma in communities and social networks would permit testing of the hypothesis that a higher level of stigma among African Americans is a mediating factor helping to explain the relationship between being African American and having greater use of psychiatric emergency services.

### **Changing social conditions**

Although examination of cross-sectional relationships between emergency service use and mental health system and community factors promises to yield insights into African Americans' overrepresentation in psychiatric emergency services, additional insights can be gained by moving beyond examination of static characteristics of persons and communities to investigations of the impact of temporal shifts in economic, social, and health-related conditions. Emergency room visits are known to be responsive to changing social conditions (69), and visit rates and reasons for visits are tracked by the Federal Centers for Disease Control and Prevention (70) and the National Institute on Drug Abuse (71).

Dynamic, longitudinal examination of psychiatric emergency room use in relation to changing community and societal conditions may be particularly useful in understanding African Americans' service use because, as described below, African Americans appear to be particularly sensitive to certain types of societal shifts. Such shifts can serve as mediators of African Americans' disproportionate emergency room use,

when African Americans are disproportionately exposed to adverse shifts. They can serve as moderators if African Americans respond more negatively than others to adverse environmental shifts. Both disproportionate exposure and greater responsiveness to adverse change can lead to African Americans' disproportionate use of the psychiatric emergency room.

### **Economic changes**

Changes in economic conditions can affect disparities in use of emergency services. Extensive study of such changes has shown that shifts toward economic adversity have particularly detrimental effects on African Americans (72). According to the National Research Council (73), "Blacks are acutely sensitive to the expansions and recessions of business cycles. Blacks are disproportionately employed in low-wage jobs, unprotected by tenure and seniority, and in manufacturing and other goods-producing industries that are particularly sensitive to the business cycle."

A few studies have demonstrated a connection between changes in society's economic well-being and emergency service use. Use of the psychiatric emergency room for involuntary treatment of persons with mental illness rises and declines in tandem with unemployment rates (74,75), and the link between rising unemployment and involuntary treatment is particularly strong among African-American males (76). These findings suggest that economic change is a moderator—that African American's greater responsiveness to economic adversity translates into greater use of emergency services. This hypothesis should be directly tested. In wider perspective, the effects of economic change on excess emergency room use and other outcomes may be further reaching than previous research acknowledges and merit more in-depth investigation.

### **Public policy changes**

Because of a changing economy and for other reasons, changes in public-sector mental health services occur

as public support and financing wax and wane. These shifts affect African Americans disproportionately, because they receive the bulk of their mental health treatment in public systems (6). For this reason, clinic closures, program terminations, and staff reductions or turnover can differentially affect African Americans, reducing already low rates of service use and exacerbating mental health problems, which ultimately results in increased rates of emergency room visits. The hypothesis that public policy changes serve as mediating factors that explain disparities in emergency services use can be tested in the context of changes to a variety of safety-net programs.

Similarly, policy-related changes external to the mental health system may also have particularly pronounced effects on African Americans. For example, changes in housing and income assistance policies, which affect African Americans disproportionately (77), could lead to changes in levels of economic and social stress, which could be reflected in emergency room use.

### **Other social shifts**

Additional sources of adversity are volatile and may be especially troublesome for African Americans. For example, epidemic illness (78,79) and drug abuse (80) are known to vary over time, and crime waves are reflected in increased violence and victimization (81). Societal racism and intolerance also vary over time (82). Temporal variation in cocaine abuse is one context in which a societal trend has been directly linked to African Americans' use of the psychiatric emergency room. As Strickland noted in a 2001 publication (83), "In California, for example, rates [of cocaine-related African-American emergency room visits] surged from 14.0 per 100,000 population in 1985 to their first peak in 1988, at 37.5 per 100,000, then temporarily dropped before making a subsequent surge in 1994 to 41.5 per 100,000."

As researchers formulate hypotheses about disparities in response to economic and social change, they should revisit the roles of African-

American communities, family members, and key community agents, considering their influence from a longitudinal perspective. Compared with whites, African Americans have less financial cushion and lower household incomes, hold far fewer total assets, and may be less insulated from financial shocks. In the face of greater health, legal, and social adversity (6), financial disruption may translate into social disruption. Even if ongoing supportive resources are adequate to meet the needs of individuals with mental illness when viewed from a cross-sectional perspective, a longitudinal perspective may reveal that shifts toward adverse social and economic conditions disrupt existing supportive interaction patterns and lead to withdrawal from family members with mental illness, thus increasing emergency services use. Because of African Americans' greater economic and social vulnerability, adverse environmental shifts can disrupt their families, networks, and communities especially, including those that previously functioned successfully. The potential for greater disruption suggests that being African American might moderate the association between adverse environmental change and emergency services use.

## Conclusions

The consistent finding that African Americans make disproportionate use of psychiatric emergency services appears to have led researchers, practitioners, and policy makers to a false sense of understanding of this persistent problem. In fact, few empirical studies have attempted to explain disparities in emergency service use. Commonly accepted explanations that focus on limited access to and poor quality of care in outpatient mental health services remain hypotheses that merit rigorous testing. Other literatures point to equally promising hypotheses related to disparities in family, network, and neighborhood characteristics that may translate into disparities in emergency room use.

The ultimate goal of this Open Forum is to motivate inquiry that re-

veals the actual links between African Americans' personal and community circumstances and their reasons for using emergency services in order to discover practical possibilities for constructive action. If higher rates of emergency services use reflect troubling conditions in African-American communities that are mediated by intolerable strain on personal and community resources, then disparities in use of emergency services indicate community distress. Such disparities also may point to detrimental changes in local mental health service systems, indicating limitations in the capacity of the mental health system to respond effectively to African Americans' mental health needs. Perhaps more for African Americans than for others, psychiatric emergency room visits serve as a sentinel.

Viewing disparities in use of emergency services as a sentinel transforms research on use of these services by African Americans from an important but academic undertaking to one that helps to develop a critical indicator for tracking social conditions in African-American communities and alerting policy makers to troubling trends. National, state, and local officials can facilitate timely recognition of undue distress affecting African-American communities by examining data on disparities in use of emergency services.

## Acknowledgments and disclosures

The authors report no competing interests.

## References

1. Mental Health: A Report of the Surgeon General. Rockville, Md, US Department of Health and Human Services, US Public Health Service, 1999
2. Smedley BD, Stith AY, Nelson AR: Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare. Washington, DC, Institute of Medicine, National Academies Press, 2003
3. Hogan M: The President's New Freedom Commission: recommendations to transform mental health care in America. *Psychiatric Services* 54:1467-1474, 2003
4. Alegría M, Canino G, Ríos R, et al: Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino whites. *Psychiatric Services* 53:1547-1555, 2002
5. Wang PS, Lane M, Olfson M, et al:

Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Archives of General Psychiatry* 62:629-640, 2005

6. 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, US Public Health Service, 2001
7. Hu T-W, Snowden LR, Jerrell JM, et al: Ethnic populations in public mental health: services choice and level of use. *American Journal of Public Health* 81:1429-1434, 1991
8. National Healthcare Disparities Report, 2004. Rockville, Md, Agency for Healthcare Research and Quality, 2004
9. Ford BC, Bullard KM, Taylor RJ, et al: Lifetime and 12-month prevalence of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition disorders among older African Americans: findings from the National Survey of American Life. *American Journal of Geriatric Psychiatry* 15:652-659, 2007
10. McGuire TG, Miranda J: New evidence regarding racial and ethnic disparities in mental health: policy implications. *Health Affairs* 27:393-403, 2008
11. Catalano RF, McConnell W, Forster P, et al: Psychiatric emergency services and the system of care. *Psychiatric Services* 54:351-355, 2003
12. Lindsey K, Paul G: Involuntary commitment in institutions: issues involving the overrepresentation of Blacks and the assessment of relevant functioning. *Psychological Bulletin* 106:171-183, 1989
13. Snowden LR, Cheung FK: Use of inpatient services by members of ethnic minority groups. *American Psychologist* 45:347-355, 1990
14. Dennis RE, Kirk A: Survey of the use of crisis intervention centers by the black population. *Suicide and Life-Threatening Behavior* 6:101-105, 1976
15. Fialkov MJ: Alcoholics and the emergency ward: part I. clinical characteristics. *South African Medical Journal* 52:613-616, 1977
16. Fialkov MJ: Alcoholics and the emergency ward: part II. a one-year follow-up study. *South African Medical Journal* 52:653-656, 1977
17. Gale MS, Beck S, Springer K: Effects of therapists' biases on diagnosis and disposition of emergency service patients. *Hospital and Community Psychiatry* 29:705-708, 1978
18. Eric Jarvis G, Kirmayer LJ, Jarvis GK, et al: The role of Afro-Canadian status in police or ambulance referral to emergency psychiatric services. *Psychiatric Services* 56:705-710, 2005
19. McLeod-Bryant S, Deas-Nesmith D: Race and therapeutic alliance. *Hospital and Community Psychiatry* 44:688, 1993

20. Muroff J, Edelson GA, Joe S, et al: The role of race in diagnostic and disposition decision making in a pediatric psychiatric emergency service. *General Hospital Psychiatry* 30:269–276, 2008
21. Strakowski SM, Lonczak HS, Sax KW, et al: The effects of race on diagnosis and disposition from a psychiatric emergency service. *Journal of Clinical Psychiatry* 56:101–107, 1995
22. Newhill CE, Mulvey EP, Lidz CW: Characteristics of violence in the community by female patients seen in a psychiatric emergency service. *Psychiatric Services* 46:785–789, 1995
23. Segal SP, Bola JR, Watson MA: Race, quality of care, and antipsychotic prescribing practices in psychiatric emergency services. *Psychiatric Services* 47:282–286, 1996
24. Klinkenberg WD, Calsyn RJ: The moderating effects of race on return visits to the psychiatric emergency room. *Psychiatric Services* 48:942–945, 1997
25. Hazlett SB, McCarthy ML, Londner MS, et al: Epidemiology of adult psychiatric visits to US emergency departments. *Academic Emergency Medicine* 11:193–195, 2004
26. Smith RP, Larkin GL, Southwick SM: Trends in US emergency department visits for anxiety-related mental health conditions, 1992–2001. *Journal of Clinical Psychiatry* 69:286–294, 2008
27. Baron RM, Kenny DA: The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 51:1173–1182, 1986
28. Classen CA, Hughes CW, Gilfillan S, et al: Toward a redefinition of psychiatric emergency. *Health Services Research* 35:735–754, 2000
29. Snowden LR, Yamada AM: Cultural differences in access to care. *Annual Review of Clinical Psychology* 1:19–41, 2005
30. Armistead LP, Clark H, Barber CN, et al: Participant retention in the Parents Matter! program: strategies and outcome. *Journal of Child and Family Studies* 13:67–80, 2004
31. Lasser KE, Himmelstein DU, Woolhandler SJ, et al: Do minorities in the United States receive fewer mental health services than whites? *International Journal of Health Services: Planning, Administration, Evaluation* 32:567–578, 2002
32. Murry VM, Kotchick BA, Wallace S, et al: Race, culture, and ethnicity: implications for a community intervention. *Journal of Child and Family Studies* 13:81–99, 2004
33. Wells K, Klap R, Koike A, et al: Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. *American Journal of Psychiatry* 158:2027–2032, 2001
34. Oster A, Bindman AB: Emergency department visits for ambulatory care sensitive conditions: insights into preventable hospitalizations. *Medical Care* 41:198–207, 2003
35. Snowden LR: African American service use for mental health problems. *Journal of Community Psychology* 27:303–313, 1999
36. Kass B, Weinick R, Monheit A: Racial and ethnic differences in health; in MEPS Chartbook No 2: Medical Expenditure Survey of the Agency for Health Care Policy and Research. AHCPR pub no 99-001. Washington DC, Agency for Health Care Policy and Research, 1999
37. Classen CA, Hughes CW, Gilfillan S, et al: The nature of help seeking during psychiatric emergency visits. *Psychiatric Services* 51:924–927, 2000
38. Trierweiler SJ, Neighbors HW, Munday C, et al: Clinician attribution associated with diagnosis of schizophrenia in African American and non-African American patients. *Journal of Consulting and Clinical Psychology* 68:171–175, 2000
39. Baker FM, Bell CC: African Americans: treatment concerns. *Psychiatric Services* 50:362–368, 1999
40. Neighbors HW, Jackson JJ, Campbell D, et al: Racial influences on psychiatric diagnosis: a review and suggestions for research. *Community Mental Health Journal* 25:301–311, 1989
41. Krupnick JL, Sotsky SM, Simmens I, et al: The role of the therapeutic alliance in psychotherapy and pharmacotherapy outcome: findings in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology* 64:532–539, 1996
42. Keating F, Robertson D: Fear, Black people and mental illness: a vicious circle? *Health and Social Care in the Community* 12:439–437, 2004
43. Sussman LK, Robins LN, Earls F: Treatment-seeking for depression by black and white Americans. *Social Science and Medicine* 24:187–196, 1987
44. Whaley A: Cultural mistrust and mental health services for African Americans: a review and meta-analysis. *Counseling Psychologist* 29:513–531, 2001
45. Herbeck DM, West JC, Ruditis I, et al: Variations in use of second-generation antipsychotic medication by race among adult psychiatric patients. *Psychiatric Services* 55:677–684, 2004
46. Snowden LR: Bias in mental health assessment and intervention: theory and evidence. *American Journal of Public Health* 93:239–242, 2003
47. Wandersman A, Nation M: Urban neighborhoods and mental health: psychological contributions to understanding toxicity, resilience, and interventions. *American Psychologist* 53:647–656, 1998
48. Kawachi I, Berkman LF (eds): *Neighborhoods and Health*. New York, Oxford University Press, 2003
49. Sampson RS, Raudenbush SW, Felton E: Neighborhoods and violent crime: a multilevel study of collective efficacy. *Science* 277:918–924, 1997
50. Ross CE: Neighborhood disadvantage and adult depression. *Health and Social Behavior* 41:177–187, 2000
51. Stiffman AR, Hadley-Ives E, Elze D, et al: Impact of adolescent mental health and behavior: structural equation modeling. *American Journal of Orthopsychiatry* 69:73–86, 1999
52. Goldsmith HF, Holzer CE, Manderscheid RW: Neighborhood characteristics and mental illness. *Evaluation and Program Planning* 21:211–225, 1998
53. Silver E, Mulvey EP, Swanson JW: Neighborhood structural characteristics and mental disorder: Faris and Dunam revisited. *Social Science and Medicine* 55:1457–1470, 2002
54. Massey DS, Denton NA: *American Apartheid: Segregation and the Making of the Underclass*. Cambridge, Mass, Harvard University Press, 1993
55. Sampson RJ, Wilson WJ: Toward a theory of race, crime and inequality; in *Crime and Inequality*. Edited by Hagan J, Peterson RD. Pal Alto, Calif, Stanford University Press, 1995
56. Rose HM, McClain PD: Homicide risk and level of victimization in two concentrated poverty enclaves: a Black/Hispanic comparison; in *Violent Crime: Assessing Race and Ethnic Differences*. New York, Cambridge University Press, 2003
57. Schulz A, Williams D, Israel B, et al: Unfair treatment, neighborhood effects, and mental health in the Detroit metropolitan area. *Journal of Health and Social Behavior* 41:314–322, 2000
58. Hooley JM: Do psychiatric patients do better clinically if they live with certain kinds of families? *Current Directions in Psychological Science* 13:202–205, 2004
59. Taylor RL, Jackson JS, Chatters LM: Changes over time in support network involvement among Black Americans; in *Family Life in Black America*. Edited by Taylor RL, Jackson JS, Chatters LM. Thousand Oaks, Calif, Sage, 1997
60. Lamb HR, Weinberger LE, DeCuir WJ Jr: The police and mental health. *Psychiatric Services* 53:1266–1271, 2002
61. Rosenfeld S: Race differences in involuntary hospitalization: psychiatric and labeling perspectives. *Journal of Health and Social Behavior* 25:14–23, 1984
62. Anglin DM, Link BG, Phelan JC: Racial differences in stigmatizing attitudes towards people with mental illness. *Psychiatric Services* 57:857–862, 2006
63. Pescosolido BA, Monahan J, Link BG, et al: The public's view of the competence, dangerousness, and need for legal coercion of persons with mental health problems. *American Journal of Public Health* 89:1339–1345, 1999
64. Whaley AL: Ethnic and racial differences in perceptions of dangerousness of per-



- sons with mental illness. *Psychiatric Services* 48:1328–1330, 1997
65. Alvidrez J: Ethnic variations in mental health attitudes and service use among low-income African American, Latina, and European American young women. *Community Mental Health Journal* 35:515–530, 1999
  66. Cooper-Patrick L, Powe NR, Jenckes MW, et al: Identification of patient attitudes and preferences regarding treatment of depression. *Journal of General Internal Medicine* 12:431–438, 1997
  67. Nadeem E, Lange JM, Edge D, et al: Does stigma keep poor young immigrant and US-born Black and Latina women from seeking mental health care? *Psychiatric Services* 58:1547–1554, 2007
  68. Alvidrez J, Snowden LR, Kaiser DM: The experience of stigma among Black mental health consumers. *Journal of Health Care for the Poor and Underserved* 19:874–893, 2008
  69. Kennedy P: *A Guide to Econometrics*, 5th ed. Cambridge, Mass, MIT Press, 2003
  70. Centers for Disease Control and Prevention: Nonfatal firearms related injuries in the United States, 1993–1997. *Morbidity and Mortality Weekly Report* 48:1029–1034, 1999
  71. Drug Abuse Warning Network, 2003: Interim National Estimates of Drug-Related Emergency Department Visits. DAWN series D-26, DHHS pub no (SAM) 04-3972. Rockville, Md, Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2004
  72. Ennis NE, Hobfall SE, Kerstin E, et al: Money doesn't talk, it swears: how economic stress and resistance resources impact inner-city women's depressive mood. *American Journal of Community Psychology* 28:149–173, 2000
  73. Jaynes G, Williams R: *A Common Destiny: Blacks and American Society*. Washington, DC, National Academies Press, 1989
  74. Catalano R, Novaco R, McConnell W: A model of the net effect of job loss on violence. *Journal of Personality and Social Psychology* 72:1440–1447, 1997
  75. Catalano R, Novaco R, McConnell W: Layoffs and violence revisited. *Aggressive Behavior* 28:233–247, 2002
  76. Catalano RF, Snowden LR, Shumway M, et al: Unemployment and civil commitment: a test of the intolerance hypothesis. *Aggressive Behavior* 33:272–280, 2007
  77. Alegría M, Pérez DJ, Williams S: The role of public policies in reducing mental health status disparities for people of color. *Health Affairs* 22(5):51–63, 2003
  78. Smith DK, Gwinn M, Selik RM, et al: HIV/AIDS among African Americans: progress or progression? *AIDS* 14:1237–1248, 2000
  79. Chiu YW, Hsu CE, Wang MQ, et al: Examining geographic and temporal variations of AIDS mortality: evidence of racial disparities. *Journal of the National Medical Association* 100:788–796, 2008
  80. Agar M, Reisinger HS: Using trend theory to explain heroin use trends. *Journal of Psychoactive Drugs* 33:203–211, 2001
  81. Lafree G, Drass KA, O'Day P: Race and crime in postwar America: determinants of African-American and white rates, 1957–1988. *Criminology* 30:157–188, 2006
  82. Bobo LD: Racial attitudes and relations at the close of the twentieth century; in *America Becoming: Racial Trends and Their Consequences*, vol 1. Washington DC, National Academies Press, 2001
  83. Strickland TL: Substance abuse; in *Health Issues in the Black Community*, 2nd ed. Edited by Braithwaite RL, Taylor SE. San Francisco, Jossey-Bass, 2001

## ***Psychiatric Services* Invites Submissions by Residents and Fellows**

*Psychiatric Services* has introduced a continuing series of articles by trainees in order to highlight the academic work of psychiatric residents and fellows and to encourage research by trainees in psychiatry.

Submissions should address issues in the planning and delivery of psychiatric services in any setting, including those of special interest or concern to trainees. Submission of original research is encouraged. Literature reviews will be considered only if they are mentored or coauthored by a senior scholar in the field.

Joshua L. Roffman, M.D., is the editor of this series. Prospective authors—current residents and fellows—should contact Dr. Roffman to discuss possible submissions. He can be reached at Massachusetts General Hospital, 149 13th St., Rm. 2656, Charlestown, MA 02129 (e-mail: jroffman@partners.org).

All submissions will be peer reviewed, and accepted papers will be highlighted in the issue in which they appear.