Disparities in Unmet Need for Mental Health Services in the United States, 1997–2010

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Objectives: **This study estimated unmet need for mental health services, identified population risk factors related to unmet need, and established baseline data to assess the impact of the Affordable Care Act (ACA) and the Mental Health Parity and Addiction Equity Act.** ***Methods:*** **National Health Interview Survey data (1997–2010) were analyzed.** ***Results:*** **Unmet need increased from 4.3 million in 1997 to 7.2 million in 2010. Rates in 2010 were about five times higher for uninsured than for privately insured persons. In a multivariate logistic model, likelihood was higher among children (age two to 17), working-age adults (age 18–64), women, uninsured persons, persons with low incomes, in fair or poor health, and with chronic conditions.** ***Conclusions:*** **Unmet need is widespread, particularly among the uninsured. Expansion of coverage under the ACA, in conjunction with federal parity, should improve access, but ongoing monitoring of access is a research and policy priority. (*Psychiatric Services* 64:80–82, 2013; doi: 10.1176/appi.ps.201200071)**

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Population access to mental health services appears to have declined in the past decade, partly as a result of limited health insurance coverage and a growing number of uninsured Americans (1). Failure to obtain needed mental health care appears to be closely associated with a lack of or inadequate insurance coverage and with out-of-pocket costs (2,3). Unmet need for mental health care can result in higher prevalence of chronic mental and general medical illnesses and excess mortality (4–6). Effective policy planning to address access disparities requires determining the current prevalence of unmet need, identifying groups at relatively high risk for unmet need, and tracking the impact of policy reforms over time (7).

Andersen and Aday's widely cited behavioral model (8–10) posits that access to health care is in large part a function of individual attributes classified into three groups of factors: predisposing (sociodemographic attributes), enabling (socioeconomic status and insurance coverage), and need (health and disability status). Analyses of data from the National Survey of Drug Use and Health (1), the National Comorbidity Survey (11), and the National Health Interview Survey (NHIS) (3,12–14) show that unmet need for primary care or mental health services was higher among adults without health insurance (1,3,11,12,14), working-age adults (1), and adults with a psychiatric diagnosis (13) and multiple functional limitations (14) or impairments (1).

The Affordable Care Act (ACA) of 2010, in conjunction with the Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA), is intended to reduce the number of uninsured persons and improve access to mental health services. The objectives of this study were to assess recent national trends in mental health care access, identify population risk factors associated with unmet need for mental health services, and establish baseline data in order to track the impact of the ACA and the MHPAEA.

Methods

The NHIS is a continuing probability survey of households conducted by the National Center for Health Statistics (NCHS). It is widely regarded by the research community as the most comprehensive and current source of population health data in the United States (15). Each year, the NCHS selects a new representative panel of households for face-to-face interviews. The Family Core Survey collects basic descriptive data for all family members. One adult and one child from each family are then randomly selected for more detailed questions in the Sample Adult Core and the Sample Child Core Survey. This study used publicly available data from both sample core surveys for the 1997 to 2010 panels (N=543,632). For subpopulation comparisons, only data from the most recent 2010 panel was used (N=38,434).

In the NHIS Sample Adult and Child Core Surveys, the subsection on health care access and utilization included the following item: "During the past 12 months, was there any time when you needed mental health care or counseling but didn't get it because you couldn't afford it?" This variable

(0, no access problem; 1, could not afford mental health services) was the basis for all trend and group comparisons conducted for this study.

There are several threats to validity inherent in this measure of mental health access. First, it requires individuals to retrospectively recall perceived need and financial circumstances, introducing possible recall bias. There is also no external validation for mental health status (for example, clinical assessments) or help-seeking behavior (for example, insurance claims). Changes in population rates of unmet need over the study period may reflect changes in incidence of mental health problems, changes in social attitudes toward disclosure of mental health problems, or changes in income or insurance coverage. However, these potential confounds affect most survey-based research investigating human behavior and are not unique to the questions at hand.

Our longitudinal comparisons were stratified by health insurance coverage (uninsured, private insurance, Medicare, and Medicaid). Relative rates of unmet mental health needs in 2010 were calculated for specific sociodemographic (age, gender, marital status, race, and ethnicity), socioeconomic (income and health insurance coverage), and health (self-assessed health status and activity limitation) groups. Risk factors associated with unmet mental health need were then entered simultaneously in a logistic regression model. In the model, health insurance was collapsed into a single categorical variable (public, private, or none).

All NHIS data were weighted to be generalizable to the U.S. population. The NCHS weights are based on estimates from the 1990 or 2000 Decennial Census. To address concerns regarding sampling error in complex household surveys, the SUDAAN Crosstabs procedure was used to generate standard errors (SEs) for prevalence estimates. Following a protocol established by the NCHS, prevalence estimates with relative SEs >30% were collapsed in summary tables. Simple group comparisons were tested with a Wald chi square test, and final strength of association measures were tested with adjusted odds ratios (AORs).

Table 1

Risk factors associated with unmet need for mental health services in the United States, 2010[a]

Variable	Estimated population (in millions)	Unmet need (%)	AOR	95% CI
Sociodemographic				
Age				
<17	66.1	1.0	3.0	1.7–5.2
18–64	188.4	3.4	8.3	5.1–13.4
≥65 (reference)	38.2	.4	1.0	
Gender				
Female	149.5	3.0	1.9	1.6–2.3
Male (reference)	143.3	1.8	1.0	
Marital status				
Not married	169.4	2.9	1.6	1.3–2.0
Married (reference)	123.3	1.8	1.0	
Ethnicity				
Latino	46.7	2.4	.8	.6–.9
Non-Latino (reference)	246.1	2.5	1.0	
Race				
Nonwhite	59.6	2.4	.7	.6–.9
White (reference)	233.2	2.5	1.0	
Family income				
<$50,000	136.5	3.7	1.5	1.2–1.9
≥$50,000 (reference)	146.6	1.4	1.0	
Health insurance				
Public	85.6	1.8	.9	.7–1.2
None	45.4	7.1	3.7	2.9–4.6
Private (reference)	153.4	1.5	1.0	
Health and disability status				
Fair or poor health	30.2	7.4	2.5	2.0–3.1
Good or excellent health (reference)	262.4	1.9	1.0	
Activity limit	41.0	5.8	2.7	2.2–3.5
No activity limit (reference)	251.5	1.9	1.0	

[a] Source: 2010 National Health Interview Survey, Sample Adult Core and Sample Child Core Surveys (N=38,434). Hosmer Lemeshow goodness-of-fit test: F=1.4, df=9, p=.18

Results

Unmet need for mental health services increased from 4.3 million in 1997 to 7.2 million in 2011, with the bulk of unmet need concentrated in the working-age population (18–64 years). Rates of unmet need for mental health care were approximately five times higher for uninsured respondents than for privately insured respondents. [Figures illustrating these trends are available in an online data supplement to this report.]

Table 1 presents data on the relative rate of unmet need for mental health services among selected risk groups in 2010 and provides AORs and 95% confidence intervals (CIs) for these groups. Compared with seniors, both children (AOR=3.0) and working-age adults (AOR=8.3) were more likely to report unmet need. Women (AOR=1.9) were more likely than men to report unmet need. Compared with whites, nonwhites (AOR=.7) were slightly less likely to report unmet need. Compared with non-Latinos, Latinos (AOR=.8) were also slightly less likely to report unmet need. In addition, persons with lower incomes (AOR=1.5) were more likely to report unmet need than those with higher incomes. Compared with individuals who had private insurance coverage, those who had no coverage (AOR=3.7) were more likely to report unmet need. Finally, fair or poor health (AOR=2.5) and limitations in daily activities (AOR=2.7) were associated with unmet need.

Discussion and conclusions

These results show that the number of Americans who reported unmet need for mental health services increased markedly from 1997 to 2010.

Cross-sectional analyses of 2010 data indicated that unmet need for mental health services was significantly higher among working-age adults, women, unmarried persons, those with no health insurance, those with low incomes, and those in fair or poor health. These findings are consistent with previous research examining risk factors related to underutilization of mental health services (12).

In all study years, the relative rate of unmet need and the total number of persons with unmet need was highest among the uninsured, but the disparity between insured and uninsured populations grew more pronounced from 1997 to 2010. If the ACA is fully implemented in 2014, it is anticipated that most uninsured Americans will be enrolled in expanded Medicaid programs or in private plans. In addition, mental health and substance abuse parity requirements will be enforced for all private plans participating in health insurance exchanges, which should increase access to care by further reducing out-of-pocket cost barriers.

If previously uninsured individuals begin to seek mental health services or substance abuse treatment, provider capacity will become an even more urgent concern. There is a pressing need to examine how these policy initiatives will affect local access issues. In rural areas, where prevalence rates of mental health and substance abuse disorders are comparable to rates in urban and suburban areas, profound mental health provider shortages already exist. Additional research and program development in this area are top priorities.

If the ACA and MHPAEA realize their objectives of reducing the number of uninsured persons and improving access to mental health services, we should see a reduction in perceived unmet need for mental health services in the years after implementation. Despite the limitations noted in regard to the NHIS measure of mental health access, this longitudinal data will allow us to track whether access to mental health services improves.

Acknowledgments and disclosures

The analysis was conducted with funding from the Program of Excellence in Rural Mental Health and Substance Abuse Treatment, Washington Life Sciences Discovery Fund (grant LSDF 08-02; Dr. Roll, principal investigator) and the National Institute on Disability and Rehabilitation Research (grant H133G070055; Dr. Kennedy, principal investigator). These agencies had no role in study design; in the collection, analysis, and interpretation of data; in the writing of the report; or in the decision to submit the paper for publication.

The authors report no competing interests.

References

1. Mojtabai R: Unmet need for treatment of major depression in the United States. Psychiatric Services 60:297–305, 2009
2. Shi L, Stevens GD: Vulnerable Populations in the United States. San Francisco, Jossey-Bass, 2005
3. Druss BG, Rosenheck RA: Mental disorders and access to medical care in the United States. American Journal of Psychiatry 155:1775–1777, 1998
4. Brown S, Inskip H, Barraclough B: Causes of the excess mortality of schizophrenia. British Journal of Psychiatry 177:212–217, 2000
5. Dixon L, Weiden P, Delahanty J, et al: Prevalence and correlates of diabetes in national schizophrenia samples. Schizophrenia Bulletin 26:903–912, 2000
6. Brown S: Excess mortality of schizophrenia: a meta-analysis. British Journal of Psychiatry 171:502–508, 1997
7. Shi L, Stevens GD, Politzer RM: Access to care for US health center patients and patients nationally: how do the most vulnerable populations fare? Medical Care 45:206–213, 2007
8. Andersen RM: Revisiting the behavioral model and access to medical care: does it matter? Journal of Health and Social Behavior 36:1–10, 1995
9. Aday LA, Andersen RM: The national profile of access to medical care: where do we stand? American Journal of Public Health 74:1331–1339, 1984
10. Andersen R, Aday LA: Access to medical care in the US: realized and potential. Medical Care 16:533–546, 1978
11. 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
12. Shi L, Stevens GD: Vulnerability and unmet health care needs: the influence of multiple risk factors. Journal of General Internal Medicine 20:148–154, 2005
13. Bradford DW, Kim MM, Braxton LE, et al: Access to medical care among persons with psychotic and major affective disorders. Psychiatric Services 59:847–852, 2008
14. Chevarley FM, Thierry JM, Gill CJ, et al: Health, preventive health care, and health care access among women with disabilities in the 1994–1995 National Health Interview Survey, Supplement on Disability. Women's Health Issues 16:297–312, 2006
15. Davidoff AJ: Identifying children with special health care needs in the National Health Interview Survey: a new resource for policy analysis. Health Services Research 39:53–71, 2004