

The NSDUH Report

April 5, 2012

Physical Health Conditions among Adults with Mental Illnesses

In Brief

- Combined 2008 and 2009 data indicate that adults aged 18 or older with any mental illness (AMI) or major depressive episode (MDE) in the past year were more likely than adults without these mental illnesses to have high blood pressure, asthma, diabetes, heart disease, and stroke
- Adults with serious mental illness (SMI) in the past year were more likely than adults without SMI to have high blood pressure, asthma, and stroke
- Those with AMI, SMI, or MDE were more likely than adults without these mental illnesses to use an emergency room and to be hospitalized

Research has found a strong relationship between physical and mental health. People with mental illnesses are more likely to have co-occurring physical health conditions, resulting in higher health care costs and disability.¹ Co-occurrence of mental and physical health problems can increase health care utilization and complicate treatment plans. Understanding common co-occurring physical and mental conditions can help providers effectively screen individuals and integrate mental health and primary care for optimal outcomes.

The National Survey on Drug Use and Health (NSDUH) collects information from adults aged 18 or older regarding mental illnesses in the past year, including any mental illness (AMI), serious mental illness (SMI), and major depressive episode (MDE). AMI is defined as having a diagnosable mental, behavioral, or

emotional disorder (excluding developmental and substance use disorders) of sufficient duration to meet diagnostic criteria specified within the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).² SMI is defined as having AMI with serious functional impairment that substantially interferes with one or more major life activities, such as work, school, or interpersonal relationships. MDE is defined using the diagnostic criteria set forth in the DSM-IV, which specifies a period of 2 weeks or longer during which there is either depressed mood or loss of interest or pleasure in daily activities, and other symptoms reflect a change in functioning, such as problems with sleep, eating, energy, concentration, and self-worth.²

NSDUH also collects information on self-reported chronic health conditions (from which heart disease, diabetes, high blood pressure, asthma, and stroke were selected based on their high prevalence³). Information on health care utilization, including any emergency room (ER) use⁴ and any hospitalization⁵ in the past year, also is collected.

This issue of *The NSDUH Report* examines common co-occurring mental and physical conditions and health care utilization. All findings in the report are annual averages adjusted for demographic variables, including age, based on combined 2008 and 2009 NSDUH data.

Mental Illnesses and Physical Health Measures

An estimated 44.5 million adults aged 18 or older had AMI and 10.4 million had SMI in the past year, representing 19.7 percent (AMI) and 4.6 percent (SMI) of the adult population. Approximately 14.5 million adults (6.5 percent) had MDE in the past year.

Nearly 52.9 million (23.6 percent) adults had lifetime high blood pressure, 24.1 million (10.7 percent) had lifetime asthma, and 18.7 million (8.4 percent) had lifetime diabetes. An estimated

13.3 million (5.9 percent) adults had ever had heart disease, and 3.2 million (1.4 percent) had ever had a stroke. In the past year, 62.0 million adults used an ER (27.8 percent), and 24.6 million adults were hospitalized (10.9 percent).

Chronic Health Conditions, by Mental Illnesses

Adults with AMI or MDE in the past year were more likely than those without these mental illnesses to have high blood pressure, asthma, diabetes, heart disease, or stroke (Table 1). In the past year, 9.7 million adults aged 18 or older had AMI and high blood pressure. Also, 6.9 million adults had AMI and asthma in the past year, and 3.5 million adults had AMI and diabetes. In the past year, 2.6 million adults had AMI and heart disease, and 1.0 million had AMI and stroke. Adults with SMI in the past year were more likely than those without SMI to have high blood pressure, asthma, or stroke.

Health Care Utilization, by Mental Illnesses

Adults with mental illnesses were more likely to use an ER or be hospitalized in the past year (at least one visit) than adults without mental illnesses (Figure 1). Compared with adults without mental illness, adults with AMI were more likely to use an ER (38.8 vs. 27.1 percent) in the past year and to be hospitalized (15.1 vs. 10.1 percent).

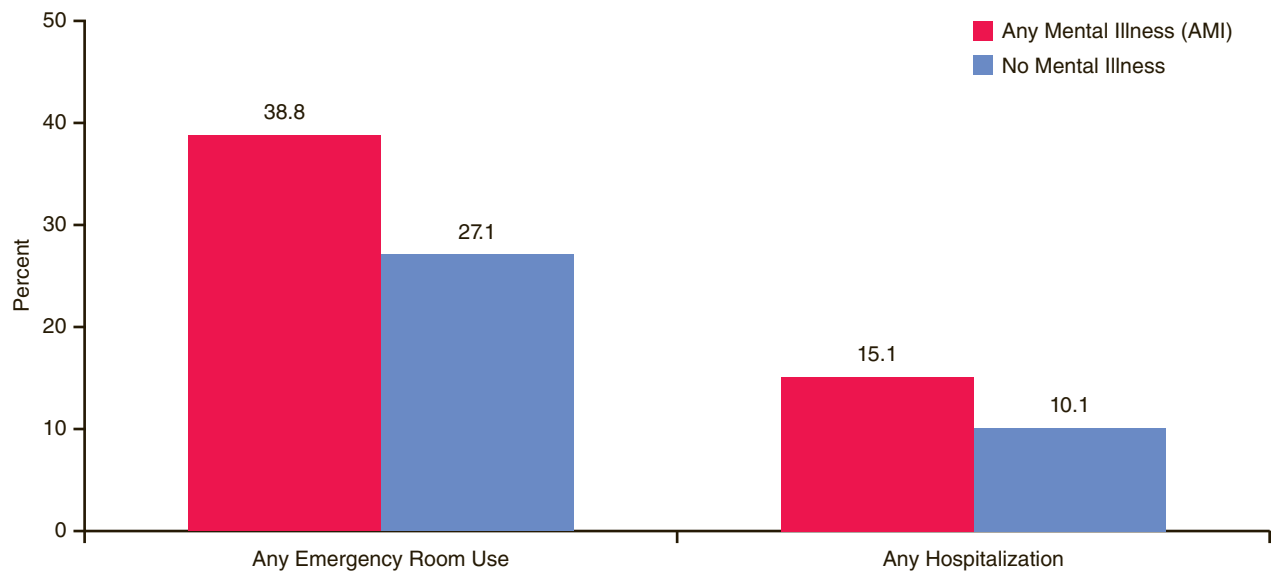
Similar associations were found with SMI and health care utilization (Figure 2) and MDE and health care utilization (Figure 3). For example, adults with SMI were more likely than adults without SMI to use an ER (47.6 vs. 30.5 percent) in the past year and to be hospitalized (20.4 vs. 11.6 percent). Likewise, adults with MDE were more likely than adults without MDE to use an ER (43.3 vs. 28.7 percent) in the past year and to be hospitalized (18.1 vs. 10.8 percent).

Table 1. Chronic Health Conditions among Persons Aged 18 or Older with and without Mental Illnesses in the Past Year: 2008 and 2009

Mental Illness	High Blood Pressure %	Asthma %	Diabetes %	Heart Disease %	Stroke %
Any Mental Illness (AMI)					
Yes	21.9	15.7	7.9	5.9	2.3
No	18.8	10.6	6.6	4.2	0.9
Serious Mental Illness (SMI)					
Yes	21.6	19.1	7.7	5.2	2.6
No	17.7	12.1	6.6	4.2	1.1
Major Depressive Episode (MDE)					
Yes	24.1	17.0	8.9	6.5	2.5
No	19.8	11.4	7.1	4.6	1.1

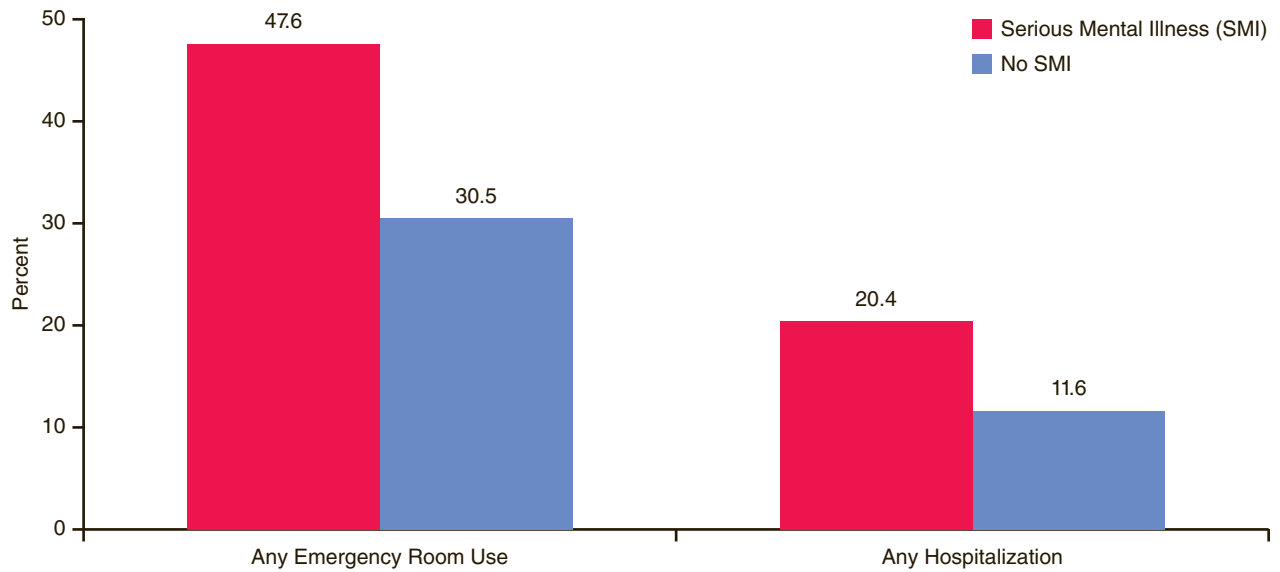
Note: All percentages were adjusted for (a) age group, (b) gender, (c) race/ethnicity, (d) education, (e) marital status, (f) current employment status, and (g) county type/metropolitan status. All associations between mental illnesses and chronic health conditions are statistically significant at the 0.05 level, except for marginally significant associations for SMI and diabetes (significant at the 0.10 level) and SMI and heart disease (significant at the 0.10 level).
 Source: 2008 and 2009 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Figure 1. Past Year Emergency Room Use and Past Year Hospitalization among Persons Aged 18 or Older with and without Any Mental Illness in the Past Year: 2008 and 2009



Note: All percentages were adjusted for (a) age group, (b) gender, (c) race/ethnicity, (d) education, (e) marital status, (f) current employment status, and (g) county type/metropolitan status.
 Source: 2008 and 2009 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

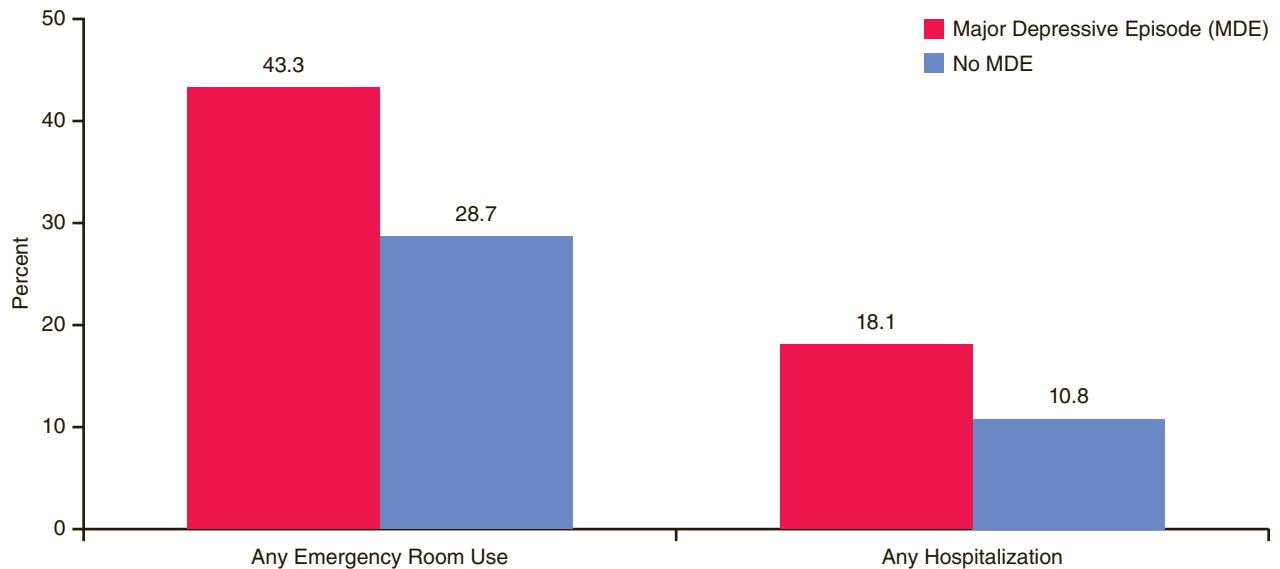
Figure 2. Past Year Emergency Room Use and Past Year Hospitalization among Persons Aged 18 or Older with and without Serious Mental Illness in the Past Year: 2008 and 2009



Note: All percentages were adjusted for (a) age group, (b) gender, (c) race/ethnicity, (d) education, (e) marital status, (f) current employment status, and (g) county type/metropolitan status.

Source: 2008 and 2009 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Figure 3. Past Year Emergency Room Use and Past Year Hospitalization among Persons Aged 18 or Older with and without Major Depressive Episode in the Past Year: 2008 and 2009



Note: All percentages were adjusted for (a) age group, (b) gender, (c) race/ethnicity, (d) education, (e) marital status, (f) current employment status, and (g) county type/metropolitan status.

Source: 2008 and 2009 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Discussion

These findings are consistent with prior studies that have shown significant associations between mental and physical health. Adults with mental illnesses were more likely than adults without mental illnesses to have heart disease, diabetes, high blood pressure, asthma, or stroke, as well as to use health care. It is not clear if one condition precedes another or how other factors, such as the use of certain medications for one condition, may intervene in the relationships with other conditions. NSDUH data are cross-sectional and do not evaluate individuals over time; therefore, conclusions about causality cannot be made. Treatment plans to address both mental and physical health symptoms need to be developed and communicated to all members of an individual's health care team.

These results suggest a greater need for (1) screening for and treating these physical conditions among persons with mental illnesses; (2) screening for and treating mental illnesses among persons with these physical conditions; and (3) promoting programs that integrate mental health screening, intervention, and treatment with primary care or primary care into specialty mental health care. This may help provide optimal care outcomes for adults with co-occurring conditions.

End Notes

- ¹ Scott, K. M., Von Korff, M., Alonso, J., Angermeyer, M. C., Bromet, E., Fayyad, J., de Girolamo, G., Demyttenaere, K., Gasquet, I., Gureje, O., Haro, J. M., He, Y., Kessler, R. C., Levinson, D., Medina Mora, M. E., Oakley Browne, M., Ormel, J., Posada-Villa, J., Watanabe, M., & Williams, D. (2009). Mental-physical co-morbidity and its relationship with disability: Results from the World Mental Health Surveys. *Psychological Medicine*, 39, 33-43.
- ² American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author. In assessing AMI in NSDUH, adults with a diagnosable disorder were defined as having AMI regardless of their level of functional impairment. In assessing MDE in NSDUH, no exclusions were made for MDE caused by medical illness, bereavement, or substance use disorders.
- ³ A list of physical health conditions that included high blood pressure, asthma, diabetes, heart disease, and stroke was presented to respondents to indicate whether a doctor or other medical professional had ever told them that they had each condition.
- ⁴ Any past year ER use was measured by a single question asking respondents how many times they had gone to a hospital ER in the past year.
- ⁵ Any past year hospitalization was measured by a single question asking respondents whether they had been hospitalized overnight in the past year.

Suggested Citation

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Findings from SAMHSA's 2008 and 2009 National Surveys on Drug Use and Health (NSDUHs)

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The National Survey on Drug Use and Health (NSDUH) is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). The combined 2008 and 2009 data used in this report are based on information obtained from 92,264 persons aged 18 or older. The survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence.

The NSDUH Report is prepared by the Center for Behavioral Health Statistics and Quality (CBHSQ), SAMHSA, and by RTI International in Research Triangle Park, North Carolina. (RTI International is a trade name of Research Triangle Institute.)

Information on the most recent NSDUH is available in the following publications:

Center for Behavioral Health Statistics and Quality. (2011). *Results from the 2010 National Survey on Drug Use and Health: Summary of national findings* (NSDUH Series H-41, HHS Publication No. SMA 11-4658). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Center for Behavioral Health Statistics and Quality. (2012). *Results from the 2010 National Survey on Drug Use and Health: Mental health findings* (HHS Publication No. SMA 11-4667, NSDUH Series H-42). Rockville, MD: Substance Abuse and Mental Health Services Administration.

Also available online: <http://www.samhsa.gov/data/>.



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