

Public health surveillance of serious psychological distress in the United States

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Published Online First 07 May 2009

Mental disorders, like chronic diseases, are leading causes of morbidity and mortality in the United States. Among the top six diagnostic categories for an estimated 34.7 million hospitalizations in 2005, chronic diseases such as heart disease and cancer accounted for 4.2 million and 1.2 million hospital stays, respectively, but in that same year, almost 2.4 million hospitalizations were for mental disorders, primarily psychoses (1.7 million).¹ Depression alone accounted for 10.4% of all 963.6 million physician office visits in 2005, and the leading drug subclass in all drug mentions during office visits in 2005 was antidepressants (5.3%), followed by antihypertensive agents (5.2%), hyperlipidemia drugs (5.0%), antiarthritics (4.2%), and antiasthmatics or bronchodilators (4.1%).² Seven of the ten leading causes of death in 2005 were chronic diseases (diseases of the heart, cancer, stroke, chronic lower respiratory disease, diabetes mellitus, Alzheimer's disease, and kidney diseases) and suicide ranked eleventh.³ As a result, public health professionals have recognized the importance of mental health for overall health and well-being, particularly, mental health's relationship with chronic diseases and health-related behaviors, as a major public health priority for the twenty-first century.^{4–6}

In 1999, the U.S. Department of Health and Human Services' **Mental Health: A Report of the Surgeon General** emphasized that mental health is closely intertwined with both physical health and general well-being such that not only can physical disease and health behaviors affect mental health, but that mental health alone can affect quality of life, work productivity, and social interactions as well as disease status, treatment, and outcomes.⁴ This report also challenged the public health community to define health as the state of complete physical, mental, and social well-being. Moreover, it called on pub-

lic health and social service agencies, health care systems, policymakers, communities, and the public to take action to promote mental health for all people in the United States.⁴ However, before the public health community can redefine health, it must first create awareness about the degree of mental health burden at the community and state level in order to drive an urgency to act and to provide a rationale that will enable state and local agencies and health systems to leverage resources for action. Epidemiologic study, or measurement, of the prevalence and determinants of mental illnesses in the U.S. population is needed to create this awareness.

Measuring mental illnesses in a general representative population sample is a challenge because diagnostic interviews to assess specific mental disorders require long instruments and cumbersome criteria that are not feasible for large population surveys. Furthermore, asking respondents for a self-reported history of specific disorders is not feasible because, for many persons, mental disorders might be undiagnosed or underdiagnosed.⁷ Kessler and colleagues developed the K-6 scale of symptoms of nonspecific psychological distress, which can be implemented easily in general population surveys, to identify persons with a high likelihood of having a diagnosable mental illness by using six questions.^{7,8} This instrument is not intended to identify or measure specific disorders, but it can identify persons with mental health problems that are severe enough to cause functioning impairment and to require treatment, thus, potentially identifying needs for programs and resources. Although multiple countries and national surveillance systems in the United States began implementing the K-6 scale by 1997,^{7–9} it was not implemented at the state level in the United States until 2007. This implementation was one result of a strategic federal partnership aimed at improving

mental health and preventing and treating mental illness. The papers in this special issue of the *International Journal of Public Health (IJPH)* – which focus on the surveillance of serious psychological distress in the United States and the interrelationship between serious psychological distress and chronic diseases, health behaviors, risk factors for chronic diseases, disabilities, and activity limitations – reflect the groundbreaking public health collaboration between two U.S. health agencies, the Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA), to collect and report state-level information on one measure of mental health.

Since its humble establishment in July 1946 as an infectious disease control agency called the United States Public Health Service Communicable Disease Center,¹⁰ the CDC has received multiple legislative mandates over the past 60 years that have allowed it to evolve into the nation's premiere health promotion, prevention, and preparedness agency and a global leader in public health.¹¹ The current mission of CDC is to promote health and quality of life by preventing and controlling disease, injury, and disability. CDC pursues its mission by working with national and international partners to monitor health, detect and investigate health problems, conduct research to enhance prevention, develop and advocate sound public health policies, implement prevention strategies, promote healthy behaviors, foster safe and healthful environments, and provide public health leadership and training.¹¹ To monitor health, CDC implements or supports multiple public health surveillance systems and registries. In 1984, CDC and state health departments established the Behavioral Risk Factor Surveillance System (BRFSS), a state-based system of annual health surveys that collects information on health risk behaviors, clinical preventive health practices, and health care access primarily related to chronic disease and injury from a representative sample of adults in each state.^{12,13} By collecting state-level data and, in some cases, community-level data, the BRFSS has been a powerful tool for state health departments and CDC to identify emerging health problems; establish and track health objectives; and develop and evaluate public health policies, health promotion programs, and health-related legislative efforts.^{14,15}

In the United States, the Substance Abuse and Mental Health Services Administration (SAMHSA) is the federal agency mandated to address mental health services. In October 1992, Public Law 102-321 established SAMHSA to strengthen the capacity of the nation's health care system to provide prevention, diagnosis, and treatment services for people at risk for or experiencing mental or substance abuse disorders.¹⁶ The current mission of SAMHSA is to build resilience and facilitate recovery for people with or at risk for mental or sub-

stance use disorders. SAMHSA funds and administers grant programs and contracts that support state and community efforts to expand and enhance prevention and early intervention programs and to improve the quality, availability, and range of substance abuse treatments, and mental health and recovery support services at the local community level.¹⁷ The Center for Mental Health Services (CMHS) at SAMHSA provides national leadership to ensure the application of scientifically established findings and practice-based knowledge in the prevention and treatment of mental disorders; to promote high-quality effective programs and services for people with or at risk for these disorders, as well as for their families and communities; to improve access and reduce barriers to these high-quality services; and to promote an improved state of mental health within the nation, as well as rehabilitation of people with mental disorders.^{17,18} Public Law 102-321 (1992) also established a block grant for states to fund community mental health services for adults with serious mental illnesses; required states to include incidence and prevalence estimates of mental illness in their annual applications for block grant funds; and required SAMHSA to develop an operational definition of serious mental illness and to create an estimation method for states on the basis of this definition.¹⁹

To help accomplish its goals, SAMHSA selected a modified version of the K-6 scale to obtain prevalence estimates of serious psychological distress through the National Survey on Drug Use and Health. In 2007, SAMHSA and CDC collaborated to provide support to 35 states, the District of Columbia, and Puerto Rico to implement an optional state module of the K-6 instrument to measure state levels of serious psychological distress through the BRFSS. The reports in the current issue of *IJPH* demonstrate that the prevalence of serious psychological distress varies between states. Serious psychological distress was associated with lower educational attainment, unemployment, identifying oneself as Hispanic or African-American, being a woman, having previously been married or never married, experiencing intimate partner violence, having no health insurance, currently smoking cigarettes, and having an abnormal weight (underweight or obesity). The prevalence of serious psychological distress was higher among persons with chronic diseases, disabilities, and activity limitations.

These findings support a growing public health awareness that serious psychological distress clusters with poor health behaviors, chronic disease conditions, disability, and activity limitations, and provides compelling evidence to support resource planning and allocation for mental health services at the local level. Furthermore, these findings suggest that some sociodemographic groups and persons with disabilities might be at greater risk for mental health disorders and re-

quire improved access to mental health services. While the temporal relationship between serious psychological distress and chronic disease outcomes cannot be determined in this cross-sectional survey, these findings and the literature make it clear that promoting mental health and preventing or treating mental illnesses should also be a priority for the public health prevention and treatment of chronic diseases. In addition to collaborating on surveillance and research efforts that improve the scientific evidence base about mental health in

the United States, public health agencies and their partners could enhance the efforts of mental health agencies by integrating mental health promotion into chronic disease prevention and health promotion efforts.⁵

Disclaimer: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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