Testimony before the
Committee on Health, Education, Labor, and Pensions
United States Senate

Mental Health and Substance Use Disorders in America: Priorities, Challenges, and Opportunities

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Mr. Chairman and Members of the Committee:

I am Thomas R. Insel, M.D., Director of the National Institute of Mental Health (NIMH) at the National Institutes of Health, an agency in the Department of Health and Human Services (HHS). Thank you for this opportunity to provide an update on the state of mental health research at NIMH, with a particular focus on our efforts to address serious mental illness, and our efforts to discover, develop, and disseminate new treatments for these brain disorders. I will review the scope of mental disorders in the United States and their impact on public health, and I will outline examples of NI [illegible]

than the deaths from breast cancer.[3,4] A cautious estimate places the direct and indirect financial costs associated with mental illness in the United States at well over $300 billion annually, and it ranks as the third most costly medical condition in terms of overall health care expenditure, behind only heart conditions and traumatic injury.[5,6] Even more concerning, the burden of illness for mental illnesses is projected to sharply increase, not decrease, over the next 20 years.[7]

NIMH-supported research has found that Americans with SMI die up to ten years earlier than the general population.[8] The low rates of prevention, detection, and intervention for chronic medical conditions and their risk factors among people with SMI contribute to significant illness and earlier death. Two-thirds or more of adults with SMI smoke;[9] over 40 percent are obese (60 percent for women);[10,11] and metabolic syndrome is highly prevalent, especially in women.[12] In addition, people with SMI frequently have co-occurring substance use disorders, and practitioners are often called upon to address mental illness and substance use problems

DELAYS IN RECEIVING TREATMENT—AND THE CONSEQUENCES

While most people with SMI eventually make contact with a health care professional, delays in seeking care can be extensive.[14] In a recent NIMH-funded study of first episode psychosis (FEP) in 22 states, the average duration of untreated psychosis was approximately 74 weeks – six times the World Health Organization's (WHO's) standard for initiating early psychosis services (*i.e.*, 12 weeks). The period immediately after the onset of psychosis when young people lose touch with reality and experience hallucinations and delusions is a critical time frame for intervention.

HOW NIMH IS ADDRESSING THIS PUBLIC HEALTH CHALLENGE

In the past, we viewed mental illnesses as behavioral conditions defined by their symptoms. Increasingly, research reveals that mental illnesses are brain disorders, with specific symptoms rooted in abnormal patterns of brain activity. In brain disorders, as a general rule, symptoms represent a late stage of a process that began years earlier. To achieve the greatest impact, our interventions should be focused on earlier, pre-symptomatic phases of illness, with a goal of preempting the disability of a chronic behavioral syndrome. Moving forward, NIMH aims to support research on earlier detection and earlier treatment. NIMH has a three-pronged research approach to achieve this aim: (1) optimize treatment to improve the trajectory of illness in people who are already experiencing the symptoms of SMI; (2) preempt the transition from the pre-syndromal (prodromal) phase to the acute phase of illness; and (3) define the risk architecture of SMI in order to move from preemption to prevention. As examples of the approach, here are four NIMH efforts on these fronts in psychosis:

[14] Wang PS, Berglund PA, Olfson M, Kessler RC. Delays in initial treatment contact after first onset of a mental disorder. *Health Serv Res*. 2004 Apr;39(2):393-415.

(1) NIMH is continuing to support the Recovery After an Initial Schizophrenia Episode (RAISE) initiative, a large-scale research project to explore whether using early and aggressive treatment will reduce the symptoms and prevent the gradual deterioration of functioning that is characteristic of chronic schizophrenia. RAISE began with two studies examining different aspects of coordinated specialty care (CSC) treatments for people who are experiencing FEP in a range of clinics, so that the results are relevant to community treatment settings throughout the country. RAISE investigators have recently shown that CSC for FEP improves psychopathology, work and school functioning, and quality of life compared to usual community care. Importantly, improvements are greatest among individuals with a shorter duration of untreated psychosis, suggesting that both the timing and content of treatment are critical.[15]

(2) NIMH is continuing to fund research directed at the prodromal phase of schi

to early intervention treatment for psychosis. For example, together with SAMHSA, NIMH co-chairs the HHS Behavioral Health Coordinating Council's Subcommittee on SMI. The subcommittee is charged with coordinating research, treatment, and supports for Americans with SMI, through collaborative, action-oriented approaches across HHS, and by contributing to the development of the Secretary's action plan to address the needs of Americans living with SMI. Another important example of trans-HHS – and, in fact, trans-Departmental – collaboration is the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative.[19] NIMH and the National Institute of Neurological Disorders and Stroke (NINDS) are co-leading the BRAIN Initiative, with participation from ten NIH Institutes and Centers, the Defense Advanced Research Projects Agency (DARPA), the National Science Foundation (NSF), the U.S. Food and Drug Administration (FDA), and the Intelligence Advanced Research Projects Activity (IARPA). The BRAIN Initiative is accelerating the development and application of innovative technologies to the creation of new tools for decoding the language of the brain.

In addition to our work on psychosis, NIMH also supports a range of mental health research on autism spectrum disorder, attention deficit-hyperactivity disorder, eating disorders, mood disorders, and post-traumatic stress disorder (PTSD). NIMH is partnering with other NIH Institutes and other Federal agencies as part of the National Research Action Plan to develop biomarkers, define the pathophysiology, and create new treatments for PTSD. NIMH-funded researchers recently reported that a computerize]TJETeriz

Moreover, NIMH has played a key role in developing a prioritized research agenda for

Mr. Chairman, as you know, this is my final hearing in front of your committee as the Director of NIMH. After 13 years of public service at NIMH, I have lost count of the number of times I have testified in front of this committee. It has been an honor to serve at NIMH and to work with members of this Committee. I leave with great pride in what we have accomplished and with great anticipation for the potential of research to improve the lives of people with mental illnesses