TBM

NEWS

News from the NIH: improving health and reducing premature mortality in people with serious mental illnesses

Susan T Azrin, PhD[1], David A Chambers, DPhil[1]

[1]National Institute of Mental Health, Bethesda, MD, USA

Correspondence to: S Azrin
susan.azrin@nih.gov

Cite this as: *TBM* 2014;4:1–3
doi: 10.1007/s13142-013-0238-8

EXCESSIVE MORBIDITY AND MORTALITY IN PEOPLE WITH SERIOUS MENTAL ILLNESS

People with serious mental illness[1] (SMI), also sometimes referred to as "severe mental illness," die from the same causes as those in the general population, e.g., heart disease, diabetes, cancer, stroke, and pulmonary disease. However, these diseases are more common in people with SMI and lead to earlier death. For example, adults with psychotic disorders die, on average, 11 years earlier than adults with no mental disorder, most often from these co-morbid medical conditions [1]. The modifiable health risk factors that contribute to these diseases–smoking, obesity, hypertension, metabolic disorder, low physical activity, substance use, poor fitness, and diet–are also more common and have an earlier onset in people with SMI [2]. The 11.5 million adults with SMI in the USA are disproportionately affected by these modifiable health risk factors, and their low rates of prevention, detection, and treatment result in substantial disease burden and premature mortality [1–3]. Effective interventions to reduce these health risk factors exist for the general population, but they are generally unavailable to people with SMI. The National Institute of Mental Health (NIMH) and other Institutes recognize the need for research to develop and test interventions that aim to eliminate excess morbidity and mortality in people with SMI. This column highlights key activities that NIMH and other institutes have undertaken in this effort, including trans-institute meetings, funding opportunities, and resource development.

CROSS INSTITUTE AND AGENCY COLLABORATION

Integrating care for a patient's multiple comorbidities, such as SMI and one or more chronic medical conditions, can be challenging for health care providers. Likewise, research to address multiple comorbidities can be challenging for the NIH, as the comorbidities frequently cut across institutes and may fall between the cracks of individual institutes. Historically, individual institutes and centers have understandably prioritized the key disease area(s) consistent within their mission, leaving cross-cutting research to rely on cross-institute collaboration. In one such collaboration, the Office of Behavioral and Social Sciences Research collaborated with the NIMH; the National Cancer Institute (NCI); the National Heart, Lung and Blood Institute; the National Institute on Alcohol Abuse and Alcoholism; the National Institutes on Diabetes, Digestive and Kidney Diseases (NIDDK); and the National Institute on Drug Abuse (NIDA) to convene the Trans-NIH Integrated Health Strategies Working Group. This working group sponsored the meeting in April of 2010, *Advancing the Science of Effective Behavioral Treatments in Primary Care*, which sharpened the research agenda around treating patients with multiple chronic health conditions. Out of this meeting came a joint program announcement, PA-12-024: *Behavioral Interventions to Address Multiple Chronic Health Conditions in Primary Care* (R01), which solicits applications each submission round through January 2014.

Focusing specifically on primary care services for people with SMI, who have high rates of medical comorbidities, NIMH hosted the meeting *Research to Improve Health and Longevity of People with Severe Mental Illness* in September of 2012. This meeting again brought numerous NIH institutes together, as well as other federal agencies, along with leading researchers on common medical comorbidities and other stakeholders in programs to improve the general health of people with SMI. Key research priorities that emerged from this meeting include the following:

- Studies targeting medical comorbidities, tobacco cessation, prevention of diabetes and cardiovascular disease, and reduction in psychotropic poly-pharmacy as the major intervention targets to reduce premature mortality;
- Studies focusing on achieving clinically (not just statistically) significant reductions in health risk factors;

[1] By "serious mental illness," we mean a diagnosable psychiatric disorder resulting in functional impairment that substantially interferes with or limits major life activities.

- Studies that leverage existing "natural experiments" by testing the effectiveness of promising services interventions already implemented at state and local levels;
- Studies integrating a combination of interventions that are often harder to sustain but produce more robust effects compared to the modest effects of single component interventions;
- Studies that improve our understanding of how best to integrate multiple treatment components; and
- Studies to develop and test strategies that reduce or eliminate racial, ethnic or gender disparities in the development of medical comorbidities, or in the receipt of or response to interventions addressing comorbidities among people with SMI.

Smoking is a major health risk factor for people with SMI. Two-thirds or more of adults with SMI smoke [4], which markedly contributes to premature mortality and increased morbidity, particularly cancer, cardiovascular disease, and respiratory disease. Persons with schizophrenia are especially likely to smoke (70–90 %), commonly smoke more than 20 cigarettes a day, and are highly nicotine dependent [5]. To address this health disparity, NIDA, in collaboration with NIMH and NCI, hosted the meeting *Improving Smoking Cessation Treatment for People with Schizophrenia* in Rockville, MD, USA in April of 2013. This trans-NIH meeting brought together scientists who are experts in the areas of smoking cessation; behavioral, pharmacotherapy, and organizational interventions; mechanisms underlying effective smoking cessation interventions; and integrating smoking cessation into systems of care for people with schizophrenia. Participants identified numerous barriers to the delivery of smoking cessation interventions for this population. For example, unlike other healthcare settings where smoking is generally prohibited, smoking has historically been a part of psychiatry in- and outpatient culture, with staff often smoking with patients and using cigarettes to promote treatment compliance. Encouragingly, research shows that smoking bans in inpatient psychiatry facilities have increased dramatically over the past 10 years, are feasible, and represent a promising opportunity to engage patients in smoking cessation. Yet, evidence-based smoking cessation interventions for inpatient psychiatry are sparse. Other research priorities for people with schizophrenia that emerged from this meeting include the following:

- Studies of technology-delivered smoking cessation treatment to extend the intervention's reach and supplement or replace more costly and less accessible clinician-delivered care;
- Studies of motivational interventions for smoking cessation;
- Studies of behavioral group smoking cessation interventions led by peer mentors; and
- Studies of system change models that promote the successful adoption of evidence-based smoking cessation programs.

FUNDING OPPORTUNITIES

Through a series of recent funding announcements, NIMH and other institutes encourage investigators in this area to submit research grant applications that develop and test services interventions to improve the health and longevity of people with SMI:

- RFA-13-140: *Leveraging Existing Natural Experiments to Advance the Health of People with Severe Mental Illness* (R24). This NIMH funding opportunity announcement (FOA) supports the research infrastructure development necessary to systematically test services interventions already in the field that have the potential to produce clinically significant reductions in common modifiable health risk factors associated with early mortality in people with SMI. At the conclusion of the 1-year funding period, grantees of this FOA should have the research infrastructure necessary to pursue a comprehensive study of the services intervention's effectiveness, including assessment of clinically significant patient-level outcomes.
- RFA-MH-14-060: *Improving Health and Reducing Premature Mortality in People with Severe Mental Illness* (R01). The goal of this NIMH FOA is to support research to test the effectiveness of services interventions that aim to reduce the prevalence and magnitude of common modifiable health risk factors that contribute to premature mortality in people with SMI, using the most rigorous methods possible. It solicits research that builds on strategies proven effective in reducing modifiable health risk factors in the general population and has the potential for large-scale delivery to people with SMI.
- PAR-12-173: *Planning Grants for Translational Research to Improve Obesity and Diabetes Outcomes* (R34). By signing onto this PAR initiated by NIDDK, NIMH signals its interest in funding services research that employs population-based approaches to delivering evidence-based screening and care for obesity and type 2 diabetes in people with SMI, whose risk for these conditions is twice that of the general population. The goal of NIMH's participation in this PAR is to develop and pilot test practical, sustainable, acceptable, and cost-efficient adaptations of efficacious strategies or approaches to prevent and treat diabetes and/or obesity in people with SMI.
- PA-12-024: *Behavioral Interventions to Address Multiple Chronic Health Conditions in Primary Care* (R01). As noted above, following the trans-NIH Work Group's meeting *Advancing the Science of*

Effective Behavioral Treatments in Primary Care, the work group issued this P*A to support research in primary care that uses a multi-disease care man*agement approach to improve patient-level health outcomes for people with three or more common chronic health conditions, one of which may be a mental illness. The proposed approach must use an integrated strategy to address the targeted medical conditions or health behaviors, rather than a distinct intervention for each target.

RESOURCE DEVELOPMENT

NIMH supported a small contract to conduct a comprehensive literature review on this topic, covering three areas:

1. Prevalence of medical conditions among people with SMI;
2. Evidence on interventions to address medical conditions and health risk behaviors in this population; and
3. Rates at which these comorbid medical conditions and modifiable risk factors in people with SMI remain unidentified, untreated, or inadequately treated in persons with SMI.

This work represents the most comprehensive synthesis of the literature to date on comorbid medical conditions and risk behaviors in people with SMI.

SUMMARY

Multiple institutes have joined NIMH in promoting research to support health and reduce premature mortality in people with SMI. Recent trans-NIH meetings, funding opportunity announcements, and resource development are stimulating this research field, which have the potential to significantly improve overall health and longevity of people with SMI.

Disclaimer: The opinions expressed herein and the interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official recommendation, interpretation, or policy of the National Institutes of Health or the US Government.

1. Druss BG, Zhao L, Von Esenwein S, et al. Understanding excess mortality in persons with mental illness: 17-year follow up of a nationally representative US survey. *Med Care*. 2011; 49(6): 599-604.
2. SAMHSA. *Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2008–2010.* Rockville, MD: Substance Abuse and Mental Health Services Administration; 2010.
3. Substance Abuse and Mental Health Services Administration. *Results from the 2011 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-45, HHS Publication No. (SMA)*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2012: 12-4725.
4. Nasrallah HA, Meyer JM, Goff DC, et al. Low rates of treatment for hypertension, dyslipidemia and diabetes in schizophrenia: Data from the CATIE schizophrenia trial sample at baseline. *Schizophr Res*. 2006; 86(1–3): 15-22.
5. Goff DC, Sullivan LM, McEvoy JP, et al. A comparison of ten-year cardiac risk estimates in schizophrenia patients from the CATIE study and matched controls. *Schizophr Res*. 2005; 80(1): 45-53.