Psychiatry's Obligation to Treat and Mitigate the Rising Burden of Age-Related Mental Disorders

Warren D. Taylor, MD, MHSc[1], **Charles F. Reynolds III, MD**[2]

[1]The Center for Cognitive Medicine, the Department of Psychiatry and Behavioral Sciences, Vanderbilt University Medical Center; and the Geriatric Research, Education and Clinical Center, Department of Veterans Affairs Medical Center, Tennessee Valley Healthcare System

[2]Department of Psychiatry, University of Pittsburgh

Psychiatry has seen significant advances in our understanding of the neuroscience of development and the evolution of mental disorders in adolescents and younger adults. This allows us to educate our communities, combat stigma, identify individuals at high risk for developing mental disorders, and provide evidence-based interventions. These efforts are critical and may reduce chronicity and recurrence of mental disorders that contribute to accelerated biological aging and persistent disability. This allows psychiatry to re-envision its goal of preventing the development of mental disorders in early life, thereby reducing disease burden and service utilization across the lifespan.[1] These recent advances hold tremendous potential benefit for future generations.

Such work cannot neglect currently aging populations. There remains – as a matter of health justice – a significant need to improve outcomes for older adults with mental disorders. Epidemiological data from Europe demonstrate that the prevalence of mental health disorders does not decrease with age. After excluding individuals with moderate cognitive impairment, older adults reported a lifetime mental disorder prevalence of 50%, with a 35% prevalence over the last year and a 23% prevalence at time of evaluation.[2] The most prevalent disorders included anxiety, affective, and substance-related disorders. Importantly, this study excluded individuals with more severe cognitive impairment and did not identify memory impairment or dementia as a mental disorder. The prevalence of mental disorders in older adults is thus likely higher, particularly when including dementia. Unfortunately, despite this high prevalence, older adults are among those with the lowest mental health service use.

The combination of high prevalence and low service use has substantial negative health repercussions at both the individual and population levels. Suicide completion rates are the highest for older men and depression increases all-cause mortality in older adults.[3] Depression and other mental disorders interfere with the optimal management of chronic medical conditions and increase mortality rates seen in medical disorders such as cardiovascular disease. The relationship between mental and physical health is cyclical, as

Correspondence: Warren D. Taylor, MD, MHSc, Vanderbilt University Medical Center, 1601 23rd Avenue South, Nashville, TN 37212, USA, warren.d.taylor@vanderbilt.edu, Telephone: (615) 322-1073, Fax: (615) 875-0686.

the prevalence of psychiatric syndromes is higher in medically ill populations, while the presence of mental disorders leads to poorer medical outcomes. Depression and other mental disorders are also risk factors for accelerated cognitive decline and the development of dementia. These comorbid relationships increase disability, reduce the ability of patients to live independently, and increase the likelihood of institutionalization.

The challenge of how to reduce the burden and improve outcomes of mental disorders in later life is magnified by shifting demographics and the aging of the United States population. According to 2017 estimates from the U.S. Census Bureau, in 2020 there will be 56.1 million adults aged 65 years or older, accounting for 17% of the population. By 2030, one in five individuals will be over age 65 years, and by 2035, for the first time in U.S. history, older adults will outnumber children. These shifts are driven by the aging of the baby boomer generation and decline in birth rates, but older adults are also living longer and the elderly population is becoming increasingly diverse. Recent observations that the U.S. life expectancy has been decreasing are unlikely to change these trends. Instead, factors likely contributing to that decline, such as suicide, addiction, and medical conditions related to obesity,[4] only highlight the need to better identify and treat mental disorders in older populations.

There are several lines of geriatric mental health research that may substantially reduce illness burden and improve outcomes. Some are relevant across the age range but have particular challenges in later life, while others are specific to older adults.

1. **Continued focus on suicide prevention.** Despite increasing suicide rates in other demographics, older adults continue to have the highest risk for completion. There is a need for both better evidence-based treatment and approaches promoting general health and social connectedness. We also need early detection approaches, such as using advanced computational techniques like machine learning [5] to identify previously unrecognized individuals at high suicide risk.

2. **Development of prevention strategies for recurrent disorders**. Mood and anxiety disorders, the most common disorders in older populations,[2] are typically recurrent. While we have substantial information about the acute treatment of these disorders, we know far less about how to keep someone well and avoid future episodes. Beyond simply relying on past history, we have no markers informing recurrence risk. We are hamstrung by our lack of understanding of the neurobiology of recurrence, limiting our ability to develop and test mechanistically-informed preventions.

3. **Complications of addictions in geriatric populations**. With the aging of the baby boomer generation, a population with more exposure to drugs and alcohol than previous generations, substance abuse rates in older adults are increasing. While treatment may be similar, the older population has high rates of often untreated coexisting medical illness and high risk of cognitive impairment. Optimal management thus requires true collaborative care.

4. **Treating mental disorders to improve medical outcomes**. Beyond addiction, other mental disorders negatively affect the outcomes of medical disorders including cardiovascular disease and diabetes. Further research is needed to elucidate the biological mechanisms underlying these observations and to identify specific targets where intervention may improve both mental and physical prognosis. Clinically this can be addressed through collaborative care that provides an avenue for detection and integration of psychiatric and medical care, providing a "whole-person" approach to treatment.

5. **Elucidate the unique contribution of mental disorders to cognitive decline and dementia risk**. Depression and other mental disorders accelerate cognitive decline and increase risk for dementia. This is not unique to individuals with a late-life onset of mental illness, where neuropsychiatric symptoms may be an early sign of underlying pathology but is also seen in individuals with a lifelong psychiatric history. The occurrence of depression in context of cognitive decline is not linked to a specific underlying neuropathology. Instead, depression has an additive effect, resulting in greater cognitive impairment than would be expected based on 6 neuropathology alone.[6] The mechanisms underlying these observations are unclear, and this challenges our ability to intervene and better preserve long-term cognitive function in this at-risk population.

These challenges are daunting. There will never be enough geriatricians, so we need collaborative approaches that allow us to improve treatment and reduce disease burden. Research in these areas requires transdisciplinary and translational team-based science, where psychiatry and psychology works with geroscientists, implementation scientists, and social scientists. The interface between mental health and medical morbidity can be effectively addressed in multidisciplinary, collaborative care models integrating mental health treatment with medicine, pharmacists, and occupational and physical therapists. Behavioral and lifestyle interventions in midlife may benefit mental and physical health trajectories with aging while also preserving long-term cognitive function. For example, higher midlife fitness levels are associated with lower risk of both depression and cardiovascular disease mortality.[7] Such interventions will facilitate successful aging and resilience, but require the aging population take a more active role in improving their health to prevent future disease. Finally, public health and public policy approaches that benefit the elderly, such as combating poverty, nutrition programs, and safe housing, may substantially reduce the burden of mental disorders.

We have a moral obligation to care for the most vulnerable in our society. Just as children are in this category, so are those at the opposite end of the age spectrum. We need better research and clinical services focused on mental disorders in the elderly, along with integrated interventions promoting resilience, wellness, and successful aging. This will proactively enhance our ability to care for older adults as, with changing demographics, we will all eventually be geriatricians.

Acknowledgments

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