ABSTRACT: 2018 ELAM Institutional Action Project

Project Title: Transforming Mental Health Outcomes for Individuals with OCD

Name and Institution: Helen Blair Simpson, MD PhD, Columbia University Medical College & the New York State Psychiatric Institute

Collaborators and Mentors: For the New York State project: Drs. Lisa Dixon, Sapana Patel, Bob Myers, and Susan Essock. For the Columbia University project: Drs. David Goldstein, Sander Markx, Anthony Zogbhi, and Ms. Regina Roper.

Topic Category: Research and education.

Background: Obsessive-compulsive disorder (OCD) is a devastating mental illness, with a lifetime prevalence twice that of schizophrenia, onset often in childhood, and a typically chronic course. Medications and cognitive-behavioral therapy (CBT) alone or in combination can help up to half of OCD patients become well. However, many go years without a diagnosis or access to care. Moreover, why medications and CBT work well in only some patients remains unclear.

Objectives: Capitalizing on my OCD expertise and unique institutional resources, I will address these problems by launching two initiatives: 1) to promote the detection and treatment of OCD by front-line clinicians in New York State (NYS); and 2) to develop precision medicine approaches to help more individuals with OCD achieve wellness. Each project can improve OCD care. Together, they could transform it.

Methods: With the NYS-Office of Mental Health and its Center for Practice Innovations (CPI), I will develop on-line methods for training front-line clinicians in how to diagnose and treat OCD and test these methods' effectiveness using the latest advances in implementation science; the goal is to reach at least 500 providers statewide in our test project. In parallel, I will partner with Columbia University's Institute for Genomic Medicine (IGM) to sequence the genomes of individuals with OCD to determine whether gene variants can identify why some people develop OCD and thus can be used to guide personalized care. The goal is to phenotype and sequence at least 500 individuals to test the power of this precision medicine approach.

Results: During the ELAM fellowship, I developed the partnerships and funding to launch both projects. For NYS, I designed and submitted a workforce development project with my CPI collaborators; over two years, we will develop and test the effectiveness of three on-line OCD training modules, leveraging CPI's expertise in implementation and their on-line training platform to target mental health clinicians across NYS. With IGM, I am phenotyping and sequencing the genomes of individuals with OCD; I secured $145,000 in philanthropic funds, and we have recruited n=101 subjects to date.

Conclusion/Potential Impact: Through my ELAM projects, I seek to link research discoveries at Columbia University to the mental health needs of NYS, addressing both institutional and public health needs. My NYS project will enable the Office of Mental Health to train front-line clinicians in the diagnosis and treatment of OCD. Success will lead to better detection and treatment of New Yorkers with OCD, a proven method for rapid dissemination of treatment advances, and a model that can be replicated across the U.S. and the globe. My Columbia University project enables the IGM to expand its current focus on medical and neurological diseases to one of the most heritable psychiatric diseases: OCD. Identification of relevant genes will support animal studies to elucidate biological mechanisms and pave the way to new diagnostic tools and treatments. This will advance Columbia's mission to develop precision medicine, and my partnership with NYS will enable New Yorkers with OCD to benefit rapidly from these discoveries.