TeleSCOPE: A Real-World Study of Telehealth for the Detection and Treatment of Drug-Induced Movement Disorders

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Abstract

Introduction. As a result of COVID-19, patients and clinicians rapidly shifted to telehealth. An observational survey study, Real-World Tele-Health Evaluation of Tardive Dyskinesia (TD) Symptoms Communication/Observation Procedure Evaluation in Outpatient Clinical Settings (TeleSCOPE), was conducted to better understand how this shift affected the evaluation of drug-induced movement disorders (DIMDs), including TD.

Methods. Twenty-minute online quantitative surveys were conducted with neurology and psychiatry specialists (physicians and advanced practice providers) who met the following criteria: ≥3 years of practice with ≥70% of time spent in a clinic; prescribed a vesicular monoamine transporter 2 (VMAT2) inhibitor or benztropine for DIMD at least once in the past 6 months; and conducted telehealth visits with ≥15% of their patients from December 2020 to January 2021.

Results. Respondents included 277 clinicians (neurology = 109, psychiatry = 168). Telehealth visits increased after COVID-19, with significantly greater increases in psychiatry vs neurology: phone (38% vs 21%); video (49% vs 42%). Across both specialties, top drivers/prompts for further DIMD evaluation were as follows: mention of tics or movements by family members or others (86%); trouble with gait, falls, walking, or standing (82%); difficulty swallowing or eating (74%); and difficulty writing, using phone, computer (71%). However, in the 6 months prior to June 2021, virtual evaluation, diagnosis, and monitoring of patients were challenging. For both specialties, many at-risk patients (ie, taking a dopamine receptor blocking agent) were not evaluated for DIMDs via video-based visits (psychiatry = 45%, neurology = 70%) or phone-only visits (psychiatry = 76%, neurology = 91%). Clinicians listed evaluation of gait/falls/walking/ standing as the most challenging aspect of virtual assessment for phone-only visits (psychiatry = 53%, neurology = 57%) and video-based visits (psychiatry = 26%, neurology = 31%). Additional challenges included limited access to computers, insufficient training for clinicians and staff, and greater difficulty obtaining reimbursements (especially for complex telehealth visits). Patients without a participating caregiver, along with lower functioning patients, were at the highest risk of a missed DIMD diagnosis.

Conclusions. During the COVID-19 pandemic, telehealth significantly reduced clinicians' ability or willingness to evaluate, diagnose, and monitor DIMDs. Clinicians stated multiple factors increased the risk of a missed or incorrect diagnosis. Challenges to optimal telehealth effectiveness included lack of patient access to computers, need for more clinician/staff training, lack of awareness of coverage, need for sufficient fee reimbursement. In-person evaluation continues to be the gold standard for assessing and treating DIMDs. However, if telehealth is necessary, the use of specific questions and directions is recommended for better communication and more accurate assessments. **Funding.** Neurocrine Biosciences, Inc.

Incarceration: An Unrecognized Public Health Crisis

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Abstract

Background. The current study involved decades of research and a Systematic Literature Review.

Methods. Six hundred and seventy-two former prisoners were interviewed, shortly upon release from incarceration. Multiple variables experienced while incarcerated were reviewed. Animal models around overcrowding and sustained levels of stress were also considered. The neurological underpinnings and relatedness to the concept of hypervigilance, thought to be an effective survival technique and PTSD were comprehensively researched. Hypervigilance is a well-regarded survival technique that is likened to the marine in a forward foxhole who hears a twig snap in the middle of the night and responds directly and decisively. The loading placed on the neuronal pathways and related brain regions is seen as a precursor to PTSD and otherwise burdensome to the overstimulated nervous system attempting to maintain an emotional equilibrium.

Results. A particular area of inquiry was around the presence of early parental/adult absence, recognized as a precursor to Complex PTSD (see World Health Organization ICD 11). But not delineated in DSM 5 (American Psychiatric Association). Significant rates of PTSD symptoms were identified in individuals experiencing early developmental trauma. All subjects met the criteria for Subthreshold PTSD at a minimum, and others (193) Posttraumatic Stress Disorder. Complex PTSD was descriptive of the findings of 179 of 193 subjects diagnosed with PTSD. These findings suggest that preexisting subthreshold Complex PTSD prior to incarceration predicts the development of Complex PTSD while incarcerated.

Conclusion. The social cost of American Corrections incubates PTSD and subthreshold PTSD, releasing to society individuals more at risk to themselves and society than prior to the Correctional experience is incalculable. A philosophical reconsideration

of the American Correctional experience at this time is long overdue. This philosophy is grounded on the concepts of Incapacitation; Punishment and Deterrence, v the European model generally of Rehabilitation and Reintegration. **Funding.** No funding

Depression Screening of Patients with Neurological Disorders in an Outpatient Setting

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Abstract

Depression is a widespread comorbidity associated with a number of neurological disorders. Untreated depression has negative impacts on patients with neurological disorders, including intensification of pain, increase in symptomatology, impaired quality of life, and nonadherence to treatment. Nonadherence can lead to disease progression, resulting in poor outcomes. Early detection of depression and prompt intervention can substantially impact the mortality, morbidity, and disease burden of this at-risk population. The American Academy of Neurology recommends screening for neurological disease-specific depression comorbidities, while the United States Preventive Services Task Force recommends routine depression screening for the general adult population. However, fewer than 5% of adults are screened in primary care, and as many as 50% of patients remain undiagnosed without a standardized program. Specialty neurology clinic visits could be a point of screening for high-risk neurology patients to positively affect outcomes. A review of the literature supports using a validated tool such as the Patient Health Questionnaire (PHQ-9) to screen for depression in outpatient settings. This quality improvement project was implemented at a private neurology practice that currently has no formalized protocol to identify depressive symptomatology. The PHQ-9 was integrated into the review of systems for patients meeting inclusion criteria with the aim of screening 90% of patients and referring 90% of those who screen positive to mental health services. Descriptive data were used to evaluate current practice status and indications for change. A total of 476 patients were seen during the time frame for this quality improvement inquiry. There were 100 patients excluded related to cognitive impairment for a sample total of n = 376. Over a period of 30 days, the goal was to screen 90% of patients. Despite challenges related to the impact of COVID-19 on the practice's delivery of care, 83.2% of patients received screening, which was 92% of our goal. Of those screened and diagnosed with depression, 100% were referred to a mental health provider, thereby exceeding the goal. An unanticipated outcome was that 46.3% of patients diagnosed with depression declined a referral to mental health. Funding. No funding

Keywords: Adults; Depression; Screening; Neurology; Quality Improvement

Diagnostic Dilemma in Psychiatry: Disease of the Mind or the Media?

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Abstract

Introduction. Delusions, such as belief in conspiracy theories (CT), exist on a continuum representing clinical and subclinical populations. Some individuals are more susceptible to CT belief. Social media has allowed conspiracy theories to spread relatively unchecked. We report a previously healthy male hospitalized for delusions and reckless behavior. We analyze potential risk factors affecting this patient.

Case Presentation. A 54-year-old Caucasian male presents with worsening persecutory and grandiose delusions over the past 6 months. An active participant in conspiracy theory-related online forums, he believes he has sensitive information regarding the Federal Bureau of Investigation. He endorses delusions of surveillance and tracking by family members, citing these concerns prompted him to rely on public transportation and prepaid cell phones, and even trespassing on U.S. Navy property. On evaluation, the patient prompts the team to review his collection of classified evidence claiming government involvement in a global sex trafficking operation. When challenged, the patient becomes argumentative, citing social media sources. He shows no evidence of overt depression, mania, or post-traumatic stress. The patient's level of functioning is reduced but not markedly impaired and he maintains employment. CBC, CMP, noncontrast head CT, CXR, and EKG are unremarkable. Cannabinoids are found on UTOX. He has a Positive and Negative Syndrome Scale score of 23/49 (positive), 10/49 (negative), and 31/112 (General Psychopathology), and Brown Assessment of Beliefs Scale score of 19/24.

Discussion. Conspiracy theories (CT) are the result of an altered perception of reality. Belief in CT correlates with negative social, health, and civic outcomes, including increased tolerance to violent and antisocial behavior. Magical thinking, trait Machia-vellianism, narcissistic traits, and primary psychopathy have been shown to be significant positive predictors of belief in CT. Individuals with maladaptive perception/attribution styles may also develop cognitive distortions. Finally, intuitive thinking, as opposed to analytical thinking, is associated with CT beliefs. Social or political crises may incite elevated emotional responses, causing increased popularity of CT during times of major social or political change. Identifying these traits may be useful for clinicians providing interventions for patients with CT ideation. This patient's presentation with delusions and nonimpaired functioning may be explained by deficits in objective reasoning as a result