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## Duration and Relevance of Untreated Psychiatric Disorders, 2: Nonpsychotic Psychiatric Disorders and Substance Use Disorders

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Although the delay of treatment onset in psychotic disorders has attracted considerable interest,<sup>1</sup> far less attention has been paid to the duration of untreated illness (DUI) in other psychiatric disorders. Paradoxically, far more data sources are available to quantify both presence of active illness and treatment utilization for nonpsychotic psychiatric disorders (NPPDs) and substance use disorders (SUDs), as these are typically included in large and representative epidemiologic surveys.<sup>2,3</sup> In a previous article, we investigated the scope of untreated psychotic disorders.<sup>1</sup> In this, the second of a 2-part series, we explore the characteristics and relevance of DUI in people with NPPDs and SUDs.

### DURATION AND RATE OF UNTREATED ILLNESS

Data derived from the National Comorbidity Survey Replication study (NCS-R) revealed that in the United States only a minority of adults with psychiatric disorders sought treatment within the first year of onset of symptoms. In this survey, the median duration of the delay of first treatment contact ranged between 6 years for bipolar disorder, 8 years with major depressive disorder (MDD), 9 years with generalized anxiety disorder, 12 years for posttraumatic stress disorder (PTSD), 13 years for attention-deficit/hyperactivity and intermittent explosive disorders, 16 years for social phobia, and 20 years for specific phobia.<sup>2</sup> Similarly, the median duration of the delay of first treatment contact for SUDs ranged from 5 years for drug dependence and 6 years for drug abuse and alcohol dependence to 9 years for alcohol abuse.<sup>2</sup> The inordinate delays in treatment onset of these relatively prevalent conditions represent not only great personal suffering and disability, but also potential mortality associated with suicide or drug overdose.<sup>4,5</sup>

In addition to frequent delays until treatment is started, untreated illness periods are common throughout the course of these chronic conditions. Cross-sectional data showed that among individuals with an NPPD in the last year, between 66.4% with specific phobia and 59.3% with generalized anxiety disorder received no treatment during that time, with numbers for SUD ranging from 71.6% for drug abuse to 62.6% for alcohol dependence.<sup>6</sup> The proportion of individuals that had not received treatment lifetime for NPPD ranged between 4.7% for panic disorder, 9.8% for bipolar disorder, 11.9% for MDD, 37.6% for PTSD, 50.1 for social phobia, and 63.7 for separation anxiety disorder, while in SUD, lack of lifetime treatment ranged from 23.1% for drug dependence to 47.3% for alcohol abuse.<sup>2</sup> Annual data on treatment utilization from the National Survey on Drug Use and Health (NSDUH) revealed that in 2015, 35% of people

with severe mental illness did not receive any type of treatment. No treatment was also received by 56.9% of individuals meeting criteria for any type of mental illness and 89.3% of those with SUD.<sup>3</sup> Compared to chronic medical conditions, such as hypertension and chronic obstructive lung disease, for which only 7.6% and 19.4%, respectively, did not receive treatment within the last year,<sup>7</sup> the delay and overall lack of treatment of mental disorders seem inordinate.

These already low rates of treatment utilization among people with any mental illness were even lower for individuals who were male, were of ethnic minority, were younger, and lived in rural areas.<sup>6</sup> Importantly, the trends in low treatment utilization among individuals with perceived need for treatment have not changed since collection of this metric began in 2008,<sup>3</sup> revealing little or no progress in reducing the elevated rates of untreated illness.

### THE ASSOCIATION OF UNTREATED ILLNESS WITH MORBIDITY AND MORTALITY

Whether the association between delayed treatment and poorer outcomes found in psychotic disorders<sup>1</sup> also applies to NPPDs and SUDs is not well understood and requires further study. One meta-analysis examining the relationship between DUI and antidepressant treatment response for MDD found an association between shorter DUI and greater treatment response; however, the small sample and high heterogeneity precluded firm conclusions.<sup>8</sup> In bipolar disorder, a small study found no significant association between delayed treatment of the first manic episode and response.<sup>9</sup> In obsessive-compulsive disorder (OCD), a small study found an inconsistent association between delayed treatment and response.<sup>10</sup> Although some SUD illness models are characterized by a stagewise progression,<sup>11</sup> the association between delayed treatment and outcomes remains largely unexamined.

While data on the implications of delayed treatment or shortening the treatment delay in NPPDs and SUDs are missing, the association between low treatment utilization and increased mortality is consistent. In a meta-analysis, fatal drug overdose in SUDs was greater than double for patients not receiving treatment compared to those with some type of treatment.<sup>5</sup> Another meta-analysis found that 68% of patients who committed suicide did not have contact with mental health services in the year before suicide.<sup>4</sup> The association between decreased ambulatory treatment of NPPDs and SUDs and hospitalization remains unknown, although this has been well established for chronic medical conditions,<sup>12</sup> and there is no reason to think that it would not apply to mental disorders. It is currently unknown whether shortening the period of untreated illness would result in reduced health care expenditures, morbidity, and mortality; however, the association between lack of care and greater mortality related to suicide and overdose suggests the need for interventions to improve active care of psychiatric conditions.

### STRATEGIES TO REDUCE DUI IN NPPDs AND SUDs

Numerous screening-based interventions have been developed to identify individuals with treatment needs for various NPPDs and SUDs. The greatest effort in early identification and treatment at the population level has focused on MDD. Recent US claims

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data, however, suggested that among patients screened for MDD, only 27.8% received treatment during follow-up.<sup>13</sup> These alarming numbers suggest that efforts beyond screening are needed to remediate the lack of initial and ongoing treatment. Studies on barriers to care help identify limitations of the screening programs and explain, in part, the large rates of untreated NPPDs and SUDs. In the NCS-R, among people meeting criteria for a psychiatric or substance use disorder but not receiving treatment, 44.8% did not believe that treatment was necessary. Among people with need for treatment, 72.6% preferred to handle the problem on their own, and only 22.2% did not seek treatment because of structural barriers, such as financial limitations.<sup>14</sup> More recent data from the 2015 NSDUH found that of patients with an SUD in the last year, only 4.8% thought they needed treatment. Although no data were available for how many people meeting criteria for any mental illness did not think they needed treatment, among those that did, 43.6% reported that financial barriers resulted in no treatment, and 30.6% preferred to deal with their symptoms on their own.<sup>3</sup>

These data suggest that while screening is a necessary element to identify individuals with treatment needs, other elements should be included in interventions that aim to reduce the rates of untreated mental illness. Given the desire for self-control over the mental health problem and that structural barriers were frequently reported as reasons for lack of treatment, interventions should provide psychoeducation, encourage patient empowerment, and facilitate access to services. Furthermore, technology is dramatically changing help-seeking behavior, with 1 in 20 internet searches being about health-related problems, and help-seeking groups are increasingly available online.<sup>15</sup> While technology offers an opportunity to improve access to care coupled with patient empowerment, there is a gap between online help-seeking and delivery of evidence-based and effective treatments. To bridge that gap, the technology industry, health care payers, funding agencies, academia, and families, among others, need to come together to develop and test effective strategies.<sup>15</sup>

**HEALTH CARE SYSTEM IMPLICATIONS**

Pragmatic research initiatives that aim at decreasing DUI for NPPDs and SUDs by improving access and engagement in evidence-based treatment should be integrated with public health literacy education campaigns as well as health care system mechanisms used for performance monitoring and reimbursement. The Centers for Medicare and Medicaid and the Agency for Healthcare Research and Quality<sup>16</sup> employ a list of Prevention Quality Indicators (PQI) that includes Ambulatory Care Sensitive Conditions (ACSC) for which inpatient treatment should be minimal if there is an appropriate ambulatory treatment alternative. These indicators are used for monitoring of performance that can be linked to value-based reimbursement. Unfortunately, none of these PQI or ACSC lists include a chronic NPPD or SUD. This is highly surprising since the unmet need for treatment is much greater for mental illness than for medical conditions. With this large unmet treatment need for conditions that are often chronic and debilitating, a greater integration of mental health outcomes in the monitoring of performance and reimbursement is necessary. Recently, 8 US states implemented the Medicaid Delivery System Reform Incentive Payment,<sup>17</sup> an initiative sponsored by the federal government. This program aims at improving health care outcomes (including mental health) by advancing the extent and quality of ambulatory treatment. The program emerged with funding but without specific recommended interventions to reduce DUI and rates of nontreatment of NPPDs and SUDs. Hopefully, effective interventions can be developed that

are based on data generated by the state ambulatory care programs for NPPDs and SUDs.

**CONCLUSIONS**

An alarmingly high number of individuals in the community meeting criteria for NPPDs or SUDs do not receive mental health treatment because of attitudinal or structural barriers. While it is not well known whether a delay or lack of treatment has an impact in the course of NPPDs and SUDs, evidence that lack of treatment is associated with greater mortality is clear. Further, although it is unknown whether reducing DUI or increasing treatment rates would have an impact on these ominous outcomes, increasing efforts focus on improving treatment of NPPDs and SUDs. These initiatives should target common attitudinal barriers through antistigma and public mental health education campaigns, as well as barriers in access to care through programs that make treatments widely accessible and affordable, while also capitalizing on emerging patterns of treatment-seeking behavior using technology.

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**REFERENCES**

1. Rubio JM, Correll CU. *J Clin Psychiatry*. 2017;78(3):358–359.
2. Wang PS, Berglund P, Olfson M, et al. *Arch Gen Psychiatry*. 2005;62(6):603–613.
3. Park-Lee E, Lipari RN, Hedden SL. Receipt of services for substance use and mental health issues among adults: results from the 2015 National Survey on Drug Use and Health. NSDUH Data Review. SAMHSA website. <https://www.samhsa.gov/data/sites/default/files/NSDUH-ServiceUseAdult-2015/NSDUH-ServiceUseAdult-2015/NSDUH-ServiceUseAdult-2015.htm>.
4. Luoma JB, Martin CE, Pearson JL. *Am J Psychiatry*. 2002;159(6):909–916.
5. Degenhardt L, Bucello C, Mathers B, et al. *Addiction*. 2011;106(1):32–51.
6. Wang PS, Lane M, Olfson M, et al. *Arch Gen Psychiatry*. 2005;62(6):629–640.
7. Lasser KE, Himmelstein DU, Woolhandler S. *Am J Public Health*. 2006;96(7):1300–1307.
8. Ghio L, Gotelli S, Marcenaro M, et al. *J Affect Disord*. 2014;152–154:45–51.
9. Kvitland LR, Ringen PA, Aminoff SR, et al. *Psychiatry Res*. 2016;246:762–768.
10. Dell’Osso B, Buoli M, Hollander E, et al. *World J Biol Psychiatry*. 2010;11(1):59–65.
11. Fergusson DM, Boden JM, Horwood LJ. *Addiction*. 2006;101(4):556–569.
12. Bindman AB, Grumbach K, Osmond D, et al. *JAMA*. 1995;274(4):305–311.
13. Olfson M, Blanco C, Marcus SC. *JAMA Intern Med*. 2016;176(10):1482–1491.
14. Mojtabai R, Olfson M, Sampson NA, et al. *Psychol Med*. 2011;41(8):1751–1761.
15. Technology for Early Awareness of Addiction and Mental Illness Meeting. October 13–14, 2016; New York, NY.
16. Prevention quality indicators overview. AHRQ website. [http://www.qualityindicators.ahrq.gov/modules/pqi\\_resources.aspx](http://www.qualityindicators.ahrq.gov/modules/pqi_resources.aspx). Accessed January 2017.
17. Schoenberg M, Heider F, Rosenthal J, et al. State experiences designing and implementing Medicaid Delivery System Reform Incentive Payment (DSRIP) pool. National Academy for State Health Policy. Medicaid and CHIP Payment and Access Commission website. <https://www.macpac.gov/wp-content/uploads/2015/06/State-Experiences-Designing-DSRIP-Pools.pdf>. March 2015.

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