Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Correspondence / Letter to Editor

Universal SARS-CoV-2 testing versus symptom based screening and testing in inpatient psychiatric setting

Dear Editor,

SARS-CoV-2, the virus that causes coronavirus disease 2019 (COVID-19), is known to spread rapidly within congregate residential settings (Kimball et al., 2020). The physical structure of inpatient psychiatric units, as well as the services provided, pose unique challenges in terms of disease exposure to other patients and staff. Shared patient rooms and bathrooms, ability to interact with other patients in common areas, eating meals in a group setting, and participating in group therapies are all unique to inpatient psychiatric hospitals. These factors are also conducive to the spread of COVID-19 in such settings. Additionally, impaired insight in patients with acute mental illness presents challenges to instituting best practices such as hand hygiene, wearing masks and social distancing.

With great interest we read Brody et al. "A COVID-19 testing and triage algorithm for psychiatric units: One hospital's response to the New York region's pandemic" (Brody et al., 2020) and would like to share our institutional experience. We were impressed with the clinical algorithm followed at their freestanding inpatient psychiatric facility, during the midst of the pandemic near New York City. We would like to share the effectiveness of a complementary approach we used at our institution in Houston, Texas.

UTHealth Harris County Psychiatric Center (HCPC) is the largest provider of inpatient psychiatric care in greater Houston-area, Texas. It is a 274 bed freestanding safety-net inpatient psychiatric hospital and provides care to approximately 9000 patients yearly, including adults, adolescents and children. Between 50–60% of the patient population is indigent at the time of admission, further raising potential COVID-19 exposure risk. Early in the local pandemic, recommended infection control measures were implemented, including a no visitor policy, reducing group activities, reducing the patient census to promote social distancing, providing masks to all staff and patients and promoting hand hygiene hospital wide. Strict symptom and contact screening, as recommended by Centers for Disease Control and Prevention (CDC), and moving Persons Under Investigation (PUI), identified on screening, to an isolation unit with strict droplet precautions, was implemented. FDA Emergency Use Authorized COVID-19 molecular assay for detection of SARS-CoV-2 RNA was utilized for diagnosing COVID-19 among identified PUI.

On June 26th, Harris County raised the level of risk to Level 1, signifying a severe and uncontrolled level of COVID-19 in Harris County, meaning outbreaks are present and worsening, and that testing and contact tracing capacity are strained or exceeded (Harris County Public Health, 2020).

To further strengthen our infection control measures, universal testing of all patients admitted to HCPC between June 29th and July 2nd 2020 was performed. A total of 185 patients across all 12 hospital units were approached and offered testing; however, only 113 (61%) consented to the test. An Institutional Review Board (IRB) approved survey was administered to patients who refused testing. The most common reasons for refusal were (1) afraid of being diagnosed (25%) and (2) afraid the test would be painful (25%).

Of the 113 asymptomatic patients who were tested, only 1 (0.9%) patient tested positive. This patient was previously diagnosed with COVID-19 (4 weeks prior) and isolation had been discontinued following symptom-based strategy, as recommended by CDC (Centers for Disease Control and Prevention, 2020). No new cases of asymptomatic individuals, absent of known or suspected SARS-CoV-2 exposure, were identified on universal testing.

At the time of this report (4/17/2020 - 7/17/2020), 45 patients were identified as PUI and appropriately isolated with droplet precautions. Of the 30 patients offered testing (testing supplies not available initially) all patients consented, and 16 (53%) tested positive and were diagnosed with COVID-19. Fever was the most common symptom present in all patients who were diagnosed with COVID-19 in our hospital.

Use of universal SARS-CoV-2 testing in patients admitted to an acute inpatient psychiatric hospital revealed that, at this point in the pandemic in Houston, all but one asymptomatic individual without known or suspected SARS-CoV-2 exposure tested negative for SARS-CoV-2. HCPC relied heavily on strict symptom and contact screening as recommended by CDC, which subsequently yielded a significantly higher number of positive patients for SARS-CoV-2. Access to clinical data of this kind provides an important resource for free standing psychiatric hospitals, where testing and access to medical expertise can be challenging. At present, HCPC continues to rely on identifying PUI on strict symptom and contact screening as recommended by CDC, followed by isolation, droplet precautions and testing. Further, the promotion of face masks, hand hygiene and social distancing among both patients and staff is regularly emphasized, as these measures are key to prevent outbreaks in inpatient psychiatric hospitals (Chu et al., 2020). The symptom screening strategy has worked well despite very high levels of infection in the general population in our community and has helped us keep inpatients in our psychiatric units free from SARS-CoV-2 infection.

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None

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Declaration of Competing Interest

None of the authors have any conflicts of interest.

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