Successful public health measures preventing coronavirus disease 2019 (COVID-19) at a Michigan homeless shelter

Dan Kelly MSW1,a, Holly Murphy MD, MPH2,a, Ravi Vadlamudi MD, MPH3, Ruth Kraut PhD4, Kate Dalessio BSW1, Anurag N. Malani MD2, Meghan Glabach2 and Juan Luis Marquez MD4

1Shelter Association of Washtenaw County, Ann Arbor, Michigan, 2St Joseph Mercy Ann Arbor Hospital, Ann Arbor, Michigan, 3Packard Health Clinic, Ann Arbor, Michigan and 4Washtenaw County Health Department, Michigan

To the Editor—Coronavirus disease 2019 (COVID-19) has spread rapidly in homeless shelters across the United States.1,2 An investigation in 5 cities identified 37% and 21% severe acute respiratory coronavirus virus 2 (SARS-CoV-2) positivity among residents and staff, respectively.3 In response, the Centers for Disease Control and Prevention (CDC) urged testing all residents and staff of homeless shelters on April 22.4

Delonis Center is the only adult shelter for Washtenaw County (population, 350,000) with 5,000 homeless persons countywide, serving >1,100 people annually. Delonis accommodates 60 people per night as a warming shelter and feeds 200 people twice daily. The serviced population is 52% African American and 45% Caucasian (average age, 45 years; 70% male). Notably, 67% report an underlying disability. More than 70% have a comorbidity, including heart disease, chronic obstructive pulmonary disease, seizure disorder, and renal failure. Mental health conditions are noted among 48% and substance abuse among 33%.

Michigan, and particularly southeastern Michigan, was heavily affected by COVID-19 early in the United States, with 65,533 reported cases as of July 5, 2020.3 Washtenaw County reported 1,067 cases by April 28 (281 per 100,000 population) and 1,526 cases by July 5, 2020.5 We describe our robust COVID-19 infection prevention strategies at Delonis Center with universal testing results and outcomes.

Methods

The first case of COVID-19 in Michigan was reported on March 10, 2020—the day the governor declared a state of emergency. We implemented our plan on March 13, including symptom screening (ie, new or worsening cough, dyspnea, subjective or measured fever (≥38°C or 100.4°F)) before entry with a risk-based triage, social distancing, and secondary housing at local churches or hotels. Clients triaged “green” with negative screen were cleared to sleep at the shelter in regular conditions. Those screened “yellow,” with ≥1 symptom, were triaged to mattresses 2 m (6 feet) apart with surgical masks and underwent a clinical assessment. Those determined ill, or screened “red,” were transported to the emergency room. People under investigation were quarantined in private rooms.

We secured a secondary site to enable sheltering in place on March 24, and we secured an offsite hotel on March 29. We implemented a temporary pay increase for staff and recruited 30 extra staff. On April 8, we mandated masks (surgical or cloth). We extended a warming shelter indefinitely to maintain shelter-in-place for all in need. On April 28 and 29, universal screening and molecular testing for SARS-CoV-2 were offered to all residents and staff.

Results

From March 13 until April 30, 15,000 health screenings were conducted. In total, we sheltered 113 persons (40%) over age 51 directly at Delonis and 281 persons overall with 4 offsite locations with a nightly average of 135. On average, 160 individuals (38 at a time, socially distanced) were served a warm meal twice daily. At all sites, clients were encouraged to practice social distancing and to shelter in place. Two positive cases were identified. Both cases were screened “red”: the first on March 17 and the second on March 25. On April 28 and 29, molecular testing was performed for 99 residents and 38 staff with 0 positive. As of July 5, there have been no additional cases.

Discussion

Our protocol was successful in identifying 2 early symptomatic cases, resulting in zero additional cases once universal testing was implemented.

We attribute the success of our program to key interventions.6 Symptom screening before entry, conducted multiple times daily, identified the only 2 COVID-19 cases at our facility before widespread transmission could occur. Maintaining the warming shelter...
Prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) in respiratory cultures and diagnostic performance of the MRSA nasal polymerase chain reaction (PCR) in patients hospitalized with coronavirus disease 2019 (COVID-19) pneumonia

Chitra D. Punjabi MD¹, Theresa Madaline MD¹, Inessa Gendlina MD¹, Victor Chen PharmD², Priya Nori MD¹ and Liise-anne Pirofski MD¹

¹Division of Infectious Diseases, Department of Medicine, Albert Einstein College of Medicine and Montefiore Medical Center, Bronx, New York and ²Department of Pharmacy, Montefiore Medical Center, Bronx, New York

To the Editor—The need for studies on coronavirus disease 2019 (COVID-19) superinfections that can inform rational antimicrobial treatment and stewardship strategies has been recognized.¹ In a recent review from our institution,² we found that up to 71% of patients admitted with COVID-19 received antibiotics. Anti-methicillin-resistant *Staphylococcus aureus* (anti-MRSA) agents, particularly vancomycin, are important stewardship targets, and they are included in the 2019 World Health Organization (WHO) Watch List of Antibiotics. Recently, guidance was published on the treatment of possible concomitant community-acquired bacterial pneumonia.