BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Self-administered SARS-CoV-2 testing put to the test.

Widespread testing for SARS-CoV-2 requires tests, safe facilities, and vast amounts of personal protective equipment (PPE). The more tests that are administered, the more PPE is used—other than in optimized settings such as drive-through testing centers. One possible solution to the problem of increased testing contributing to PPE shortages might be found in self testing for the virus. If patients were able to perform nasal tests on themselves and the results were reliably accurate, the rate of PPE use in many medical settings could be lowered drastically, saving costs, and contributing to safety. Therefore, researchers at Stanford University performed a study, published today in *JAMA Network Open* in which thirty patients known to be positive SARS-CoV-2 agreed to be re-tested later in a drive-through setting. At the time of re-testing, three tests were administered. Two of the tests were given by physicians (one via nasal swab and one via throat swab), and the third sample was a nasal swab performed by the patients on themselves. The researchers then compared the results. There were no differences. The results from the specimens taken by the patients themselves correctly diagnosed active infection 100 percent of the time. The only discordant tests in the entire study occurred in the case of one patient whose physician-administered tests were both negative, even though the patient-administered test was positive. The results of this study provide encouraging evidence that patients can test themselves for SARS-CoV-2 if properly supervised. However, there are some limitations to consider. While the ages of the patients were wide (19 to 80 years), older patients in whom covid-19 is most devastating were not studied here. Additionally, the patients in the study were well enough to be able to participate in drive-through testing. Patients who were either too ill to drive themselves or too ill to be driven to such testing sites were not included; such patients may not be able to correctly administer the self-tests, which involve some degree of effort and tolerance for self-induced discomfort. Additionally, patients were paid $20 to participate in the study; the subjects may have been motivated by the payment incentive to adhere to the uncomfortable protocol more than they otherwise would have. Finally, it is unclear whether patients would agree to self-testing alone. The subjects in this study participated knowing that their self-administered tests would be "checked" against those performed by medical professionals. In a non-research environment, patients who are less concerned about conserving PPE may not wish to do their own SARS-CoV-2 tests. Finally, two largely unrelated pieces of data were also tucked in this study that are worth repeating; 60 percent of the patients reported *no* known exposure to others with diagnosed or suspected coronavirus infection, nor those with flu-like symptoms, or who had recently returned from high-risk travel. This supports observations that SARS-CoV-2 is being transmitted in patients with few or no symptoms. Secondly, 17 percent of patients with diagnosed coronavirus also tested positive for other infections, including RSV (bronchiolitis), parainfluenza (croup), and mild seasonal coronaviruses, suggesting that "co-infection" is not uncommon.

–Jeremy Samuel Faust MD MS

POLICY BRIEFING
Covid-19 could increase human trafficking, experts fear.
Human trafficking has been recognized as a health risk due to physical and psychological injuries. We asked an expert to summarize the topic as it may pertain to covid-19. –Brief19

Human trafficking involves using force, fraud or coercion to compel someone to engage in commercial sex or other work. It is recognized as a major global public health problem and often occurs before, during, and after major crises such as covid-19. Trafficking can adversely affect individual health. Health issues that can be caused or exacerbated by human trafficking include traumatic injury, infections, unwanted pregnancy, malnutrition, exposure to toxins, PTSD and depression. The results of these stressors can include family strife/disintegration, community bias/discrimination, business drive for exploitable/unpaid labor, and societal expectations of cheap consumer goods. Because trafficking is a clandestine criminal activity, its prevalence is difficult to quantify. Based on 2016 estimates, internationally there may be as many as 24.9 million people currently in forced labor. Covid-19 has likely increased the risks associated with trafficking in at least three ways: 1) increasing the health risks for those already exploited; 2) heightening the risk of new victims being exploited and; 3) disrupting response efforts.

In the United States, more than two-thirds of trafficking victims access health care while being trafficked (as opposed to after), creating a responsibility for healthcare professionals and other service providers to be aware of trafficking and take steps to detect it and, when possible, to prevent it. During the covid-19 pandemic healthcare professionals on the frontlines can help in the following ways: 1) assess high-risk patients for trafficking by looking for occupational injuries, substance use patterns, and mental health presentations; 2) address the social determinants of health and connect patients with healthcare and community-based resources they need; 3) educate other health professionals on trafficking; 4) build health systems protocols to respond to trafficking; 5) for long-term care providers, engage with isolated individuals regularly via secure telecommunication (short-term providers may attempt to arrange follow-up with appropriate providers); 6) teach families to spot both abuse and common avenues of recruitment into forced labor and the commercial sex industry; 7) conduct Know Your Rights trainings to increase awareness of exploitative circumstances; and 8) promote harm reduction strategies.

Organizations can assist trafficked patients/clients during this pandemic in the following ways: 1) expand digital avenues for innovative engagement with clients; 2) evaluate for new client needs/vulnerabilities arising as a consequence of reduced access to opportunities/services; 3) help clients safety plan for themselves and their families; 4) integrate client voice and input into program design; 5) institute intentional self-care to combat secondary and vicarious trauma for healthcare and other social service providers; and 5) coordinate sustainability planning and transition planning in case of provider illness.   *–Hanni Stoklosa, MD, MPH*