

Online Mindfulness Sessions Helping Mental Health During Pandemic

Kenny Walter

The COVID-19 pandemic most likely has caused wide-spread mental health issues around the world.

However, online mindfulness intervention program might be able to fill the gap for improving the collective well-being of the population, particularly targeting those with symptoms of depression or anxiety.

A team, led by Suzan R. Farris, BA, Wake Forest School of Medicine, assessed the impact of online mindfulness on psychological distress, altruistic efforts, and the quantity, quality, and availability of online mindfulness resources during the COVID-19 pandemic.

“Virtual mindfulness is an increasingly accessible intervention available world-wide that may reduce psychological distress during this isolating public health crisis,” the authors wrote. “Kindness and altruism are being demonstrated during the pandemic. The consolidated online



mindfulness resources provided may help guide clinicians and patients.”

The Study

Overall, in the prospective, single-arm, non-randomized clinical trial there

were 233 individuals in the study, 203 from the US, 20 international participants, and 10 individuals with an unknown location. The trial consisted of a single online mindfulness mediation

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Generalized HCV Screening in Psychiatric Patients May Be Cost-Effective Strategy

By Jonathan Alicea

Findings from a new study suggested that screening for hepatitis C (HCV) among all patients admitted for psychiatric hospital visits may be more cost-effective than a risk-based approach.

Led by François Girardin, MD, Intensive Care and Emergency Medicine, Geneva

University Hospitals, Switzerland, the investigative team sought to explore the cost of scaling-up HCV screening for all psychiatric patients as a potential case-detection strategy for viral elimination.

“By screening for HCV infection in people engaging with psychiatric health ser-

vices, high-risk individuals can be targeted, cases identified, and patients linked to short duration DAA-based treatments that are recommended for managing the physical health of people with mental illnesses,” the investigators wrote.

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session, as well as pre- and post-session surveys.

The investigators sought main outcomes of mindfulness session helpfulness, online platform effectiveness, and immediate pre- to post-session changes in momentary stress, anxiety, and COVID-19 concern, as well as qualitative themes representing how individuals are helping others during the pandemic and the absolute changes in quantity of mindfulness-oriented web content and free online mindfulness resource availability between May-August 2020.

“We are all born with the capacity for mindfulness...It can help reduce stress and anxiety, and mindfulness meditation practice can help enhance this ability.”

Results

The majority of participants found the online mindfulness therapy beneficial and the electronic platform effective for practicing mindfulness (89%; 95% CI, 82-93%). This resulted in decreased momentary anxiety (76%; 95% CI, 69-83%), stress (80%; 95% CI, 72-86%), and COVID-19 concern (55%; 95% CI, 46-63%) ($P < 0.001$ for each measure).

“We are all born with the capacity for mindfulness,” Rebecca Erwin Wells, M.D., M.P.H., associate professor of neurology at Wake Forest School of Medicine, part of Wake Forest Baptist Health, and principal investigator for this study, said in a statement. “It can help reduce stress and anxiety, and mindfulness meditation practice can help enhance this ability.”

FDA Expands Use of Sinus Treatment to Include Congestion from Allergies, Influenza

By Kenny Walter



The US Food and Drug Administration (FDA) has expanded the use of ClearUp Sinus Pain Relief treatment to now include indications for treating congestion for common colds, influenza, and allergies.

The Expansion

The expansion, awarded to Tivic Health Systems, builds on the current uses for the treatment, which include allergy-related sinus pain caused by seasonal and year-round allergies.

ClearUp is a small handheld device that provides non-invasive and drug-free treatment utilizing gentle microcurrents to relieve sinus and nasal congestion and allergy-related sinus pain.

Clinical Trials

The expansion is based on various clinical trials showing the treatment was effective in treating moderate to severe congestion as part of a De Novo Request grant. In trials, investigators found patients with moderate to severe congestion reported an average of 35% reduction in congestion

symptoms 10 minutes following the use of ClearUp, significantly besting placebo.

Following 4 weeks of regular use, participants reported an average of 44% of symptom reduction.

Reaction

“Bioelectronic devices stimulate the body to produce factors that it very tightly regulates. In the case of ClearUP, it stimulates the trigeminal nerve, which is responsible for sensing pain and pressure of the face, and also sympathetic fibers of the autonomic nervous system, which can induce vasoconstriction and reduced swelling. Together, modulation of these pathways provides rapid relief of sinus pain and congestion without the side effects that often come with drugs used for these symptoms. For the large number of patients affected by sinus pain and congestion, whether from allergies or infections, this is a game-changing new product,” said Subinoy Das, MD, chief medical officer at Tivic Health and CEO and Medical Director, U.S. Institute for Advanced Sinus Care and Research, in a statement.

Study Sheds Light on Pediatric Depression in Sickle Cell Disease

By Jonathan Alicea

A new study from Nigeria found that depression in young patients with sickle cell disease (SCD) was linked with increasing age and education level.

Led by Osita Uchenna Ezenwosu, PhD, Faculty of Medical Sciences, University of Nigeria, the investigative team conducted a cross-sectional study with adolescents and children with sickle cell anemia (SCA), all of whom were attending the weekly sickle cell clinical at the University of Nigeria Hospital. All participants were aged 7 – 17 years old.

“While depression has been shown to be the commonest of the psychosocial problems experienced by people with SCA, some factors may explain the presence of depres-

sion in children with SCA,” they wrote, indicating disease severity, age, gender, educational level, and family socio-economic status as potential contributing factors.

Pediatric Depression in Sickle Cell

The team evaluated 84 pediatric patients with SCA, each matched 1:1 by age and sex to controls recruited from the outpatient clinic.

Depression was measured using the children depression inventory, which consisted of 27 items related to negative mood, interpersonal problems, ineffectiveness, negative self-esteem, and anhedonia.

Each option was scored 0-2 with the

highest possible score being 54. Any score ≥ 19 was considered clinical depression.

The investigators also use relevant questionnaires to gather information on clinical disease severity and socio-demographic data, including personal characteristics and education level of parents.

As such, they reported that 45.2% of sickle cell patients and 47.6% of controls belonged to the middle socioeconomic class.

Among the patients with SCA, the mean depression score was 7.64—as compared with 6.77 for the control group. However, the difference between the cohorts was not considered statistically significant.

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FDA Approves Dasiglucagon for Severe Hypoglycemia in Diabetic Patients

By Jonathan Alicea

The US Food and Drug Administration (FDA) has approved dasiglucagon (Zegalogue) for the treatment of severe hypoglycemia in people with diabetes aged 6 years or older.

Granted to Zealand Pharma, the approval was based on positive results from 3 Phase 3 studies, all of which were double-blind, placebo-controlled, multicenter trials. All participants were children aged 6 – 17 years with type 1 diabetes.

The primary endpoint for the studies was time to plasma glucose success—which was defined as an increase in blood glucose of ≥ 20 mg/dL from time of injection—and without additional interven-

tion within 45 minutes.

This goal was achieved across the pediatric population as well as within the adult population in the corresponding Phase 3 adult trial. Patients who received dasiglucagon achieved a significantly faster median time to blood glucose recovery of only 10 minutes following administration—compared with 30-45 minutes with placebo.

Even more, 99% of adults treated with dasiglucagon recovered within 15 minutes.

The most common adverse events reported in adults were nausea, vomiting, headache, diarrhea, and injection site pain. In children, adverse events were nausea,

vomiting, headache, and injection site pain.

“The U.S. FDA approval of Zegalogue is an exciting achievement for both patients and Zealand,” said Emmanuel Dulac, President and CEO, Zealand Pharma, in a statement.

“We would like to thank the trial participants, their families and caregivers, the investigators and their staff, and our employees who made the Zegalogue clinical studies and this resulting approval possible. We are committed to helping people with diabetes manage the potential consequences of their disease and look forward to making Zegalogue available in the U.S. in June.”

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“However,” they continued, “it is common practice to only offer HCV testing to individuals with known risk factors for infection (i.e., a history of substance misuse disorder) on psychiatric hospital admission.”

As such, the team used real-world prevalence estimated from individual patient data at a Swiss psychiatry department and evaluated cost-effectiveness from a healthcare provider perspective using a decision-tree screening model.

Scaling-Up HCV Testing

A total of 5420 psychiatric inpatients admitted or re-admitted between 2016-2020 were included in the analysis.

A majority (51.4%) of the population was male, and the average age was 46.5 years.

The most common psychiatric conditions were mood (affective) disorders; schizophrenia; schizotypal and delusional disorders; neurotic, stress-related, and somatoform disorders; personality disorders; and disorders due to active psychoactive substance use.

Girardin and colleagues reported that the prevalence of HCV in patients with substance misuse disorder ($n = 1013$) was

25.7% versus 3.49% among the remaining inpatients ($n = 3535$). As such, overall prevalence among the entire inpatient group was 10.8%.

Previous HCV screening was performed in 55.1% of those with a history of substance use disorder, while screening was performed 31.8% of those without it.

Based on the aforementioned data and the investigator model, the team noted an incremental cost-effectiveness ratio of \$9188 per quality-adjusted life-year gained with scaled-up HCV screening.

This ratio remained cost-effective even with an overall HCV prevalence as low as 0.07%.

Furthermore, using a generalized screening method would produce a population-level net monetary benefit of \$435,156,348. This would also allow for 917 additional patients per year to be detected and treated at a cost of \$3294 per person—versus \$2122 using the risk-based screening method.

Implications

Girardin’s team thus indicated that generalized screening for all admitted psychiatric patients is likely to be cost-effective when compared with risk-based strategies—even

when accounting for a range of willingness-to-pay thresholds.

However, they acknowledged, HCV prevalence estimates may be discrepant with prevalence in other countries – nonetheless, they pointed to their considerations for variations in such parameters.

They also highlighted the importance of continuing cost-effective assessments in the outpatient setting as well integrating inpatient and outpatient care to ensure that all patients reliably progress from diagnosis to cure.

“As health authorities look to target HCV screening initiatives at underserved and high-burden populations, in order to achieve the World Health Organization (WHO) incidence reduction of 80% by 2030, this study provides further evidence suggesting persons with mental illnesses are a high-risk group and that psychiatric facilities are a crucial location in which to diagnose and treat HCV infection,” the investigators concluded.

The study, “Hepatitis C prevalence in the psychiatric setting: cost-effectiveness of scaling-up screening and direct-acting antiviral therapy,” was published online in JHEP Reports.

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The investigators did note that depression scores and age had a statistically significant positive linear relationship ($r = 0.253$; $P = .02$).

This relationship was also observed for education level.

“The scatter plot with line of best fit of the relationship between depression scores and educational levels of the subjects showed a progressive increase in depression scores with increasing educational level,” Ezenwosu and team wrote.

As such, there was statistically significant positive linear relationship ($r = 0.225$, $P = .04$).

“This is expected since their educational

level naturally increase with increasing age,” they noted.

There were no statistically significant associations between depression and socio-economic status as well as disease severity.

Conclusion

The investigators acknowledged the self-reporting measurements as well as the single-center nature of the study as primary limitations.

Nonetheless, they indicated that their findings only stress the importance of equipping caretakers, especially those in low-resource settings, with navigating the psycho-social aspects of sickle cell disease.

“[This significant association between depression and age] can be explained by the fact that aside more depressive symptoms in adolescents because of the peculiar stressors they face from physical, emotional, and psychological challenges, those with SCA experience additional disease-related challenges such as delayed puberty, short stature, fatigue and leg ulcers, which can lead to depression,” they wrote.

The study, “Clinical Depression in Children and Adolescents With Sickle Cell Anaemia: Influencing Factors in a Resource-Limited Setting,” was published online in Research Square.