Researcher: Leslie Adams, PhD, MPH  
  
Institution: Johns Hopkins Bloomberg School of Public Health   
  
Grant Type: 2020 Young Investigator Grant – $90,000  
  
Grant Title: Real-time assessments of suicidality among Black men: a mixed methods approach To help prevent suicides, researchers are looking into using smartphone apps that collect real-time data about people's thoughts and feelings throughout the day. This method, known as ecological momentary assessment (EMA), could provide valuable insights. In the United States, the number of suicides among Black men has been rising, but the EMA method hasn’t been well studied with Black men experiencing suicidal thoughts and behaviors (STB). To examine whether Black men find it acceptable and practical to use a smartphone app for tracking STB, Dr. Leslie Adams recruited 10 Black men aged 18 and older with a history of suicidal thoughts or behaviors. For a week, participants received four daily prompts for short surveys on their mental state, depression, social isolation, and feelings of being a burden, along with nightly surveys on sleep quality and discrimination experiences. An end-of-study interview was also conducted. Most participants found the app acceptable and practical, despite some technical issues and repetitive questions. Some participants reported they felt worse after answering questions about suicide, which has not been found in other studies with different populations. These results indicate that smartphone-based data collection is feasible but more understanding about accounting for cultural differences is needed to improve effectiveness and user experience for Black men. Citation: Adams, L. B., Watts, T., DeVinney, A., Haroz, E. E., Thrul, J., Stephens, J. B., Campbell, M. N., Antoine, D., Lê Cook, B., Joe, S., & Thorpe, R. J., Jr (2024). Acceptability and Feasibility of a Smartphone-Based Real-Time Assessment of Suicide Among Black Men: Mixed Methods Pilot Study. JMIR formative research, 8, e48992. https://doi.org/10.2196/48992  
  
Over the past 20 years, the number of suicides involving opioids has doubled, contributing to a serious public health problem. People who die by suicide and those who die by accidental opioid overdose exhibit many similar risk factors. While the trends and characteristics for both death by suicide and death by opioid overdose have been researched separately, the role of opioids in suicide is less known. There is also a growing hypothesis that a substantial portion of opioid-involved suicide deaths also involve other substances (i.e., polysubstance opioid suicide), but it is unclear if the characteristics of individuals who die by polysubstance opioid suicide differ from those who solely die by opioid overdose. Dr. Ryoko Susukida and her team analyzed data from 12,038 people who died in Maryland between 2006 and 2020, comparing those who died by suicide involving opioids (947 people), those who died by suicide without opioids (6,896 people), and those who accidentally died from opioid overdoses (4,125 people). They also examined people who died by suicide involving opioids and other drugs (polysubstance use). The team found that people who died by opioid-involved suicide were more frequently aged 18-64, non-Hispanic Whites, and unemployed or disabled than people who died by suicide with other methods. When compared to people who died by accidental opioid overdose, those who died by suicide involving opioids were more likely to be female, under 18 years old, non-Hispanic Whites, and those who were employed. Nearly half of the people who died by suicide involving opioids had other drugs involved as well, particularly among non-Hispanic Whites. These results suggest that people who died by suicide with opioids require special attention when developing suicide prevention interventions. Citation: Susukida, R., Nestadt, P. S., Kharrazi, H., & Wilcox, H. C. (2024). Prevalence and Correlates of Opioid-Involved Suicides in Maryland. Archives of suicide research : official journal of the International Academy for Suicide Research, 28(2), 660–673. https://doi.org/10.1080/13811118.2023.2207612  
  
Researcher: Igor Galynker, MD, PhD, Benjamin Lok, PhD  
  
Institution: Icahn School of Medicine at Mount Sinai, Florida International University  
  
Grant Type: 2019 Linked Standard Research Grant – $300,000  
  
Grant Title: Virtual Interaction Training in Emotional Self-Awareness for Working with Suicidal Patients Clinicians working with suicidal patients often experience high stress, which can contribute to negative emotional responses. These negative emotions can contribute to clinicians being less empathic, and they may unintentionally push patients away, harming the therapeutic relationship and worsening patient outcomes. Therefore, clinicians may need additional training on emotional self-awareness and empathic communication to manage potential negative emotions and improve their effectiveness with suicidal patients. One way of achieving this is with virtual human interaction training (VHI), which presents clinicians with virtually developed patients exhibiting a variety of clinical scenarios while measuring clinical effectiveness and empathic communication. As part of a multi-site linked AFSP grant, Dr. Igor Galynker and Dr. Benjamin Lok tested two virtual human interaction training conditions: one with instructions on verbal empathic communication and reminders to report negative emotions during virtual sessions (i.e., scaffolded), and one without any reminders or instructions (i.e., non-scaffolded). Sixty-two clinicians participated in three VHI sessions. Results showed that negative emotions decreased in both groups after two training sessions. The scaffolded group improved empathic communication after one training session, while the non-scaffolded group improved after two. Surprisingly, the non-scaffolded group had better clinical efficacy after two training sessions, while the scaffolded group did not. It turns out this was likely due to the method of providing reminders which may have been distracting. These results support VHI’s ability to improve emotional awareness and empathic communication in clinicians and suggest that nonverbal expressions of empathy may be crucial for working with suicidal patients. Citation: Yao, H., Gomes de Siqueira, A., Rogers, M. L., Bloch-Elkouby, S., Lawrence, O., Sarli, G., Foster, A., Mitelman, S. A., Galynker, I., & Lok, B. (2024). The impact of scaffolded and non-scaffolded suicidal virtual human interaction training on clinician emotional self-awareness, empathic communication, and clinical efficacy. BMC medical education, 24(1), 413. https://doi.org/10.1186/s12909-024-05371-9  
  
Researcher: Ali Bani-Fatemi, PhD  
  
Institution: Centre for Addiction and Mental Health (Canada)   
  
Grant Type: 2020 Postdoctoral Fellowship – $112,000  
  
Grant Title: Imaging of the Suicidal Brain in Schizophrenia Schizophrenia is a psychiatric disorder that has been associated with risk for suicidal thoughts and behaviors. One hypothesis about what could contribute to this risk, called the “accelerated age hypothesis,” theorizes that several clinical features typically associated with older age that are experienced by individuals with schizophrenia (e.g., increased risk of cognitive impairment, inflammation, oxidative stress, and reduction of telomere length in blood cells) may play a part in increasing risk for suicidal thoughts and behaviors. With this in mind, Dr. Ali Bani-Fatemi and his team examined DNA from blood samples of adults with schizophrenia who had a history of suicide attempts, as well as of a separate group of adults with schizophrenia with no history of suicide attempts. Dr. Bani-Fatemi found that those who had attempted suicide showed signs of being 10.7 years older biologically (i.e., in their cells) than chronologically (i.e., their age in years). This accelerated aging was evident in both males and females, with males showing slightly more pronounced differences. The findings suggest that the stress and severity of schizophrenia might accelerate aging, increasing suicide risk. Measuring biological age could help identify increased risk for suicide in individuals with schizophrenia who may benefit from specifically tailored treatments that take biological aging into account. Citation: Jeremian, R., Bani-Fatemi, A., Strauss, J. S., Tasmim, S., Dada, O., Graff-Guerrero, A., Gerretsen, P., & De Luca, V. (2022). Investigation of accelerated epigenetic aging in individuals suffering from schizophrenia in the context of lifetime suicide attempt. Schizophrenia research, 243, 222–224. https://doi.org/10.1016/j.schres.2019.05.023   
  
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