SESSION 1
Covid-19 and Suicide Risk

1. **Suicidal Ideation Among Medical and Health Science Students at Campus Colleges in Tamil Nadu, India.**

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Statement of Purpose: Suicide is the second leading cause of death among college students. Most studies on suicidal are from high-income countries, and it is not clear if estimates can be interpreted in those of low- and medium-income countries. The study aims to estimate the burden of suicidal ideation among medical health sciences students at Campus Colleges in a multidisciplinary university in Tamil Nadu. **Methods/Approach:** A cross sectional study was conducted among medical and health sciences students at Campus colleges in a university. A carefully curated questionnaire was developed based on Beck Scale for Suicidal Ideation scale, CDC – Adverse Childhood experiences scale, and perceived stress scale for COVID-19. The survey was sent out by email, response was collected over the world wide web from November 2020 to Jan 2021. **Results/Conclusions:** The interim analysis of 250 participants consists of 66% females, the aged ranged from 18 to 40 years and almost 90 % of them were in first and second year of their studies. Study found active desire to for suicidal attempt to be 15%. About 19 % of the students felt being alone very often. Among the student 2% were using drugs, 5% reported using alcohol and 7% using Tobacco. The most common adverse childhood experiences reported were physical abuse (18.4%) and sexual abuse (14 %). About 5% of participants very often felt stressed due to COVID-19. **Innovation and Significance to the Field:** An online survey was the most desirable method for reaching out the students from different parts of the country. Due to the perceived stress among students in virtual classrooms during the COVID-19 it is highly possible that students do not report their suicidal ideas or attempts.

2. **Strategies for Suicide Prevention During the COVID-19 Pandemic in Brazil**

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Statement of Purpose: The purpose of this study seeks to identify the suicide prevention strategies adopted by psychologists during the Covid-19 pandemic in Brazil. **Methods/Approach:** The methodology used was based on a bibliographic review, based on an article and a reference electronic booklet on the theme between 2017 and 2020. **Results/Conclusions:** The researches shows that there are several risk factors at work in ses where subjects manifest suicidal behaviors. As a consequence of the Covid-19 pandemic, these subjects may have high levels of acute stress related to adaptations to the new routine that was required, as well as a worsening of psychological suffering, increasing the social vulnerability of this part of the population. caAiming to mitigate the negative consequences arising from social isolation, there was a mobilization of students and professionals who sought to offer the online assistance service in cases of psychological emergency. During the pandemic, there was an expansion of care in centers specialized in suicide prevention, with the service being offered in the online and telephone mode. **Innovation and Significance to the Field:** The Regional Council of Psychology in Brazil issued a technical note authorizing online care for cases considered to be a psychological emergency, the result of suicide prevention strategies in Brazil and public policies aimed at promoting mental health.

3. COVID-19 Psychiatric Disparities & Risk of Suicide at UTMB

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Statement of Purpose: We aim to identify patients with a recent COVID-19 diagnosis at UTMB and compare the demographics and suicide attempt rates of patients with and without a post-COVID psychiatric diagnosis. **Methods/Approach:** We used TriNetX, a global federated health research network providing access to electronic medical records from approximately 1.7 Million patients in the UTMB Galveston network. The TriNetX platform only uses aggregated counts and statistical summaries of de-identified information. The diagnosis of COVID-19 infection was determined by the presence of any of the following ICD-10 codes: U07.1 COVID-19; B34.2 Coronavirus infection, unspecified; J12.81 Pneumonia due to SARS-associated coronavirus; B97.29 Other coronavirus as the cause of disease classified elsewhere; and U07.2 COVID-19, virus not identified (WHO). We defined the presence of psychiatric illness as the presence of ICD-10 codes from F20-F48, which includes disorders of anxiety, mood, and psychosis. The TriNetX search function was configured to assess for new psychiatric diagnoses made after a diagnosis of COVID-19 had occurred. We then compared the demographic data of the two cohorts and performed a statistical analysis to evaluate for instances of suicide attempts (ICD-10 T14.91). **Results/Conclusions:** Female survivors of COVID-19 appear to be at increased risk of psychiatric illness compared to males, comprising 60% of the patients diagnosed with a psychiatric disorder following COVID-19 infection. We also found that there were no reported suicide attempts in the patient population that lacked psychiatric diagnoses, whereas the patients with psychiatric illness had a suicide attempt rate of 0.552% ($p < 0.0001$). **Innovation and Significance to the Field:** Females appear to be at increased risk of psychiatric illness and suicide after COVID-19 infection. Screening for mental illness and evaluation of support structure could be beneficial at the time of hospital discharge.

4. The Social Media Role in Suicide Prevention During the COVID-19 Pandemic

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Statement of Purpose: The purpose of this study is to analyze the social media role in suicide prevention during the COVID-19 pandemic. The Pan American Health Organization (PAHO) has warned that the COVID-19 pandemic may increase the risk factors for suicide. The mitigation strategies established by the World Health Organization (WHO), like isolation and social distance, may affect the world population mental health. **Methods/Approach:** This study used as a method a literature review through the databases of Directory of Open Access Journals, Web of Sciences, and PubMed. To achieve the objective of the study, the following search equation was used: social media AND COVID-19 OR pandemic OR pandemical. **Results/Conclusions:** The research resulted in 266 articles that addressed the social media role in suicide prevention during the COVID-19 pandemic. The study identified the increase in the social media use during the COVID-19 pandemic and that they are fundamental tools in suicide prevention as they represent the only leisure, interaction, fun, and communication form among many people who have psychosomatic illnesses with risk factors for suicide. The sudden change in the population routine that started working at home caused a withdrawal from friends and many people do not find it easy to adapt to these changes.

Despite these circumstances, people should look for strategies to stay connected with their family and friends. For this reason, the social media has become an essential tool for maintaining the connection between everyone who has any electronic device with access internet access. **Innovation and Significance to the Field:** The social media adoption during this pandemic scenario may represent an innovative strategy for understanding, intervening, and preventing the suicide. They play an important role, as it is not possible to calculate when this pandemic scenario will end.

5. Social Distancing Predicts Urban Suicide Rates: An Analysis of the Spanish Flu Epidemic in 43 Cities

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Purpose: Social distancing (e.g., school & business closings) has been emphasized in current socio-political efforts in controlling COVID-19. Such policies are assumed to increase suicide risk through lowering social integration. While two studies have linked the presence of a pandemic to suicide rates, no study has assessed the variation in the _degree_ of social distancing within a nation on suicide rates during a pandemic. The present study fills this gap. **Methods:** Data on suicide rates are from the US Bureau of the Census and refer to suicides per 100,000 population in each of 43 large American cities during the Spanish Flu epidemic of 1918. Social distancing is measured from archival data including those from 86 local newspapers and weekly/monthly state and local health department reports. Specifically, distancing is measured as the number of days of closures of schools, public gatherings, and mandatory quarantines. These ranged from 33 in Newark to 170 days in Kansas City Missouri. Following previous work, a control is incorporated for influenza death rates. **Results:** Adjusting for the influenza mortality rate, each ten day increase in the index of social distancing was associated with a 2.9% increase in the suicide rate. The model explains 12.6% of the variance in suicide rates. **Innovation and Significance to the Field:** This is the first study to document an association between within nation variation in social distancing as a predictor of suicide rates. While such distancing has been associated with a fall in influenza deaths, it may also be associated with an increase in suicide deaths.