

Abstracts of Poster Presentations-22nd Congress on Disaster and Emergency Medicine 2023

POSTER PRESENTATIONS

Effects of Self-Affirmation on Mental Status During the Prolonged COVID-19 Pandemic

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Introduction: Self-affirmation is known to buffer the development of anxiety symptoms into depressive symptoms, and a study during the early days of the COVID-19 pandemic revealed a role for this self-affirmation. In Japan, the COVID-19 pandemic has occurred repeatedly, and at this point (November 16, 2022), prior to an eighth wave. The possibility of ameliorating the psychological effects of this prolonged COVID-19 pandemic through efficient interventions targeting self-affirmation will be examined.

Method: Study dates: June 25, 2020; September 25, 2020; February 10, 2021; November 24, 2021; February 7, 2022; August 31, 2022

Survey participants: Registered monitors of the research company (Neo Marketing Co., Ltd.) Each 1,000 respondents

Questionnaire:

- 1) Attributes: gender, age, region, number of family members
- 2) DASS-21 (Depression, Anxiety, Stress Scale-21)
- 3) LSNS-6 (the Lubben Social Network Scale-6)
- 4) Self-affirmation

CIPS (Clance Impostor Phenomenon Scale)

Rosenberg Self-Esteem Scale (Japanese version)

The self-affirmation scale (CIPS; Rosenberg Self-Esteem Scale) was measured from the 4th to the 6th survey.

Contribution of each factor to depressive symptoms:

The DASS-21 Depressive Symptom Scores from the 4th through 6th surveys were examined using Prediction One with the DASS-21 Anxiety Symptom Score, DASS-21 Stress Score, Connections Score, Rosenberg, and CIPS score as factors to determine their contribution.

Results: At the time of the second survey (September 25, 2020), DASS-21 scores peaked and then declined. CIPS and Rosenberg Self-Esteem Scale scores showed no change from the 4th to the 6th session. The result of contribution of each factor to depressive symptoms by Prediction One showed anxiety symptoms contributed the most to depressive symptoms.

Conclusion: A model in which self-affirmation prevents anxiety symptoms from progressing to depressive symptoms is reasonable until the 7th wave of the COVID-19 pandemic in Japan.

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Risk Mapping of Coastal Cities that Sinking Faster than Sea-Level Rise by 2050: The Case of Jakarta and Semarang

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Introduction: Coastal area cities Jakarta and Semarang in Indonesia portray higher hazard that links to an annual sinking rate of up to 20cm. Four main factors have been determined to contribute: groundwater extraction, sea-level rise (SLR), land subsidence, and coastal floods. It accounts for people living in those high-risk regions to prevent the exacerbating situation.

Method: This study's main objective is to generate risk mapping in Jakarta and Semarang using Geographic Information System (GIS) from three open-source websites: Surging Seas, OpenStreetMap (OSM), and Healthsites.io. Through GIS analysis, prediction can be analyzed more accurately with precision when the sinking hits slowly to identify the risks involved.

Results: Satellite data geographical analysis risk mapping done via Surging Seas, OpenStreetMap (OSM), and Healthsites.io showed that by 2050, North, West, part of Central Jakarta and Semarang will sink 5.6 meters below sea level with an annual sinking rate up to 20cm. Critical infrastructure will be affected in Jakarta, including Soekarno-Hatta International Airport and Tanjung Priok Port. Similarly, in Semarang, the Jenderal Ahmad Yani International Airport, Tanjung Mas Port, and Terboyo Bus Station are affected as well. Consequently, it will situate 13 million at both coastal cities as the worst impacted, categorized by the World Bank data, updated Sept 2022 as Urban Poverty, the population living at 2.15 US Dollar a day poverty line. Those living below the poverty line are also deprived of education and access to

