Innovative Research Program on Suicide Countermeasures in FY2022: Report on Commissioned Research Results

Field 3: Suicide countermeasures using big data, AI, etc.

Topic number：R4-3-1

Research topic:

Mental Health DX Project using AI analysis of visual information

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Summary:

Background: One of the reasons why the suicide rate has not decreased in Japan is the high level of reluctance to see a psychiatrist. Many people in Japan are reluctant to rely on professional treatment for psychiatric disorders. In addition, during the COVID-19 pandemic, many Japanese citizens became anxious about seeking face-to-face psychiatric care.

Purpose: This study is to objectively evaluate psychological disorders prior to psychiatric consultation, and

to establish techniques to improve psychological disorders based on the evaluation.

Methods: As a tool for objectively detecting and improving psychological disorders, we examined this system using me-fullness®, a smartphone application developed by POLA Chemical Industries, Inc.

Results: After using me-fullness® for one month, improvement in depression, anxiety symptoms, and stress as indicated by the DASS-21 score was observed.

Policy Proposals/Recommendations: Early detection and improvement of depression is considered one of the major issues in suicide prevention. By integrating the current digital technology in Japan, we believe it will be possible to alleviate depression and prevent suicide by expanding the target population to include people who do not use smartphones and the visually impaired, who were not included in this study.