

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

**Field 2: Analysis and approach towards high-risk groups for suicide**

**Topic number : R4-2-4**

Research topic:

Analysis of medical consultation condition by suicide attempters using DPC and claim data

Principal Researcher:

Department of Preventive Medicine and Community Health, School of Medicine, University of Occupational and Environmental Health, Japan Professor Shinya Matsuda

Co-Researcher:

Department of Preventive Medicine and Community Health, School of Medicine, University of Occupational and Environmental Health, Japan Associate Professor Keiji Muramatsu

Summary:

Using the medical insurance receipt database of a municipality in eastern Japan, between April 2014 and March 2019, patients who were admitted to DPC project participating hospitals for drug addiction (first 6 code of DPC = 161070), we analyzed the status of consultations at medical institutions, the status of injuries and illnesses, and the status of prescribed drugs. Changes over time were divided into 1 to 3 months, 4 to 6 months, 7 to 9 months, and 10 to 12 months before admission to the DPC hospital. For example, we analyzed the change in the prescription amount of 112 (hypnotic-sedatives, anxiolytics) and 117 (psychiatric-neurological drugs) during the observation period.

Analyzes confirmed a trend toward increased pre-hospital prescriptions among psychiatric patients hospitalized for drug addiction, with the exception of men aged 6-18 years and women aged 75 years and older. In particular, women aged 6-18 years experienced a sharp increase in pre-hospital prescriptions. However, the absolute amount of prescriptions was lower in the young age group than in the middle-aged and older age group.

In order to prevent suicide due to drug overdose, it is important for doctors and pharmacists who provide medical care and prescriptions to pay attention to changes in the prescription amount of psychiatric drugs. Electronic prescriptions are expected to become commonplace in Japan in the future. It is necessary to build a system that provides information on changes in prescription amounts to doctors and pharmacists who perform examinations and prescribes based on the data.