

# Stroke and Suicide among People with Severe Mental Illness

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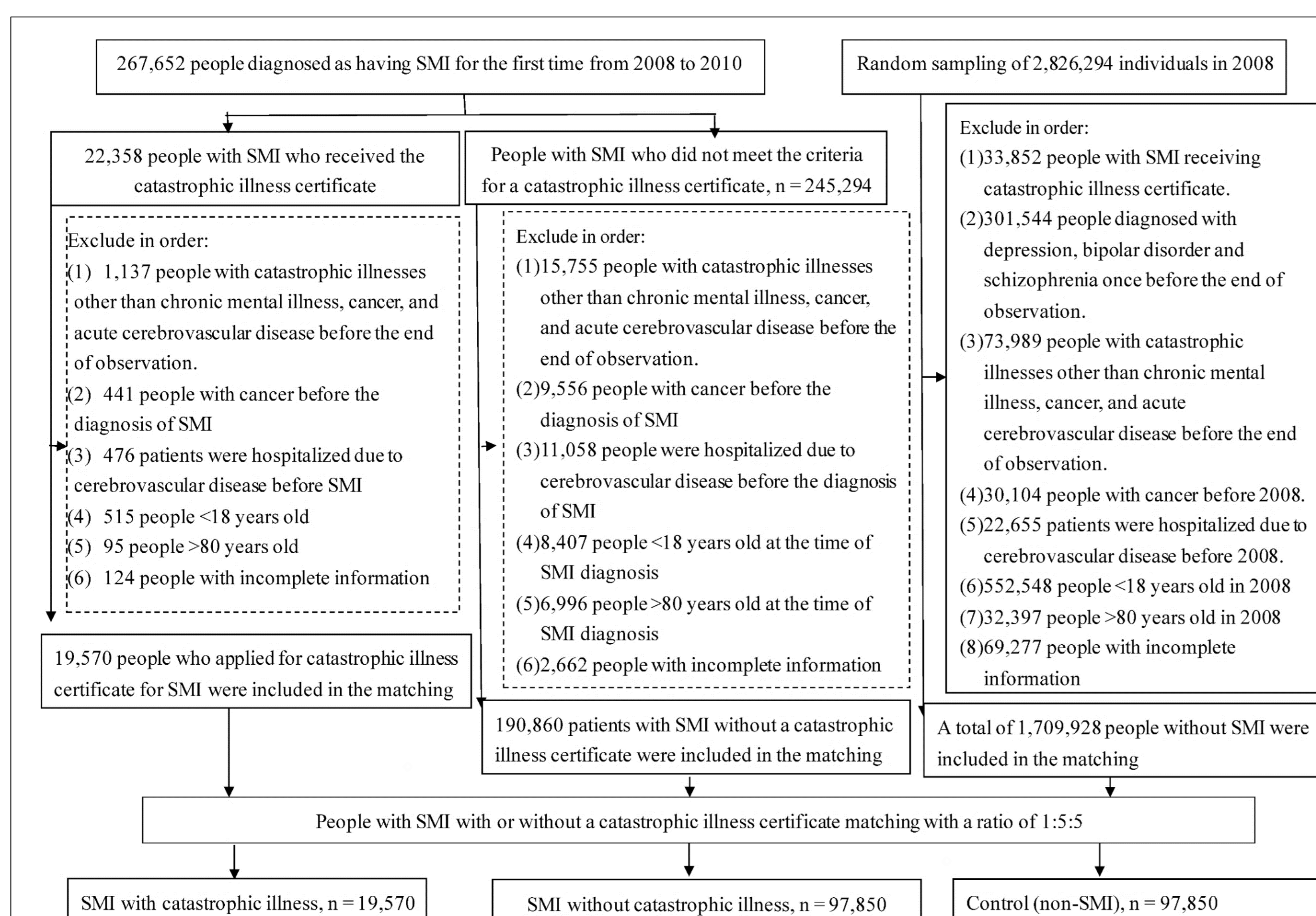
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## Background

The associations between healthcare service use and the risk of stroke, suicide, and death in people with SMI (depression, bipolar disorder, and schizophrenia) in Taiwan remain unclear. Understanding how these patterns differ from those in the general population may help develop effective prevention strategies.

## Aims

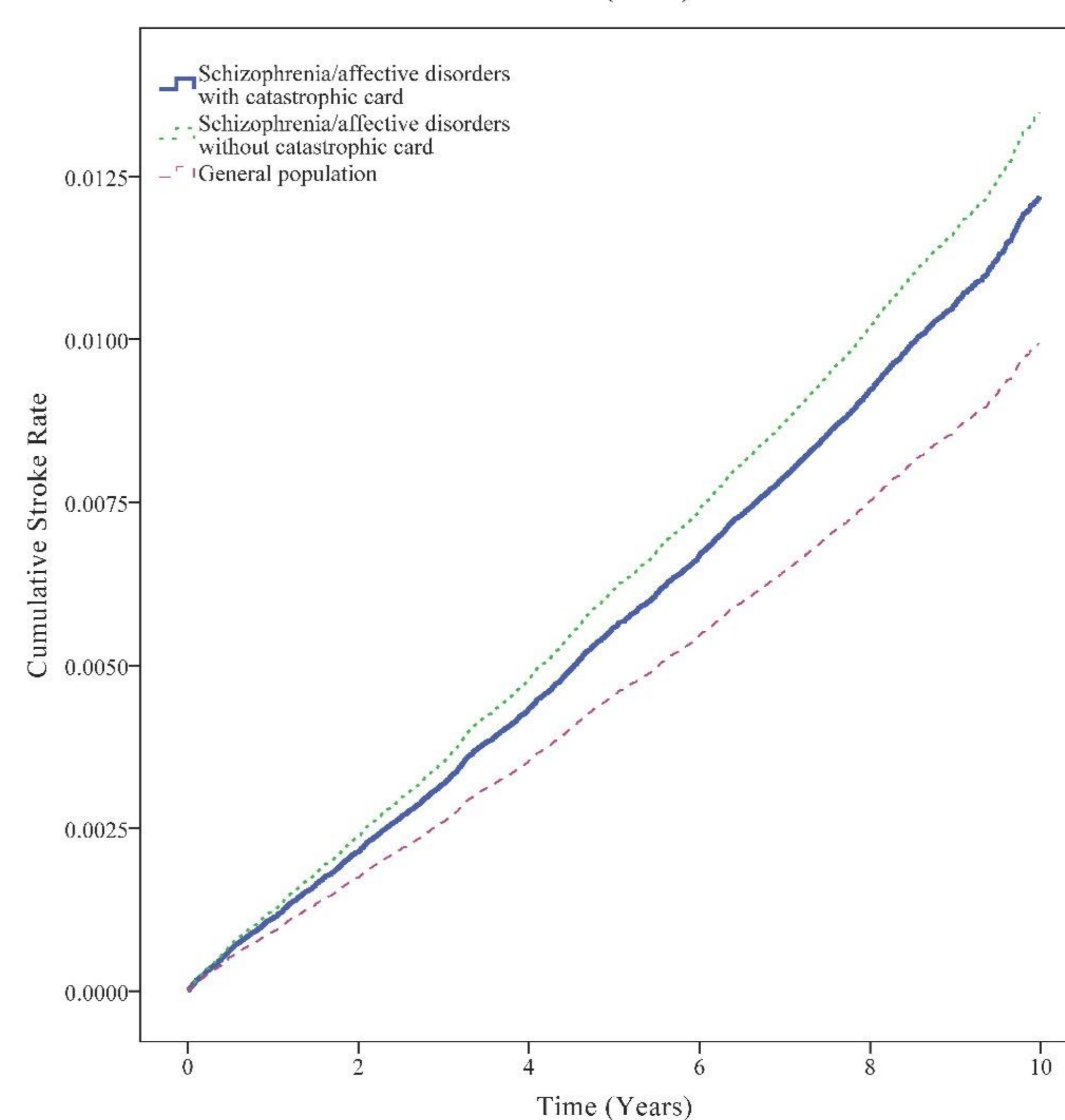
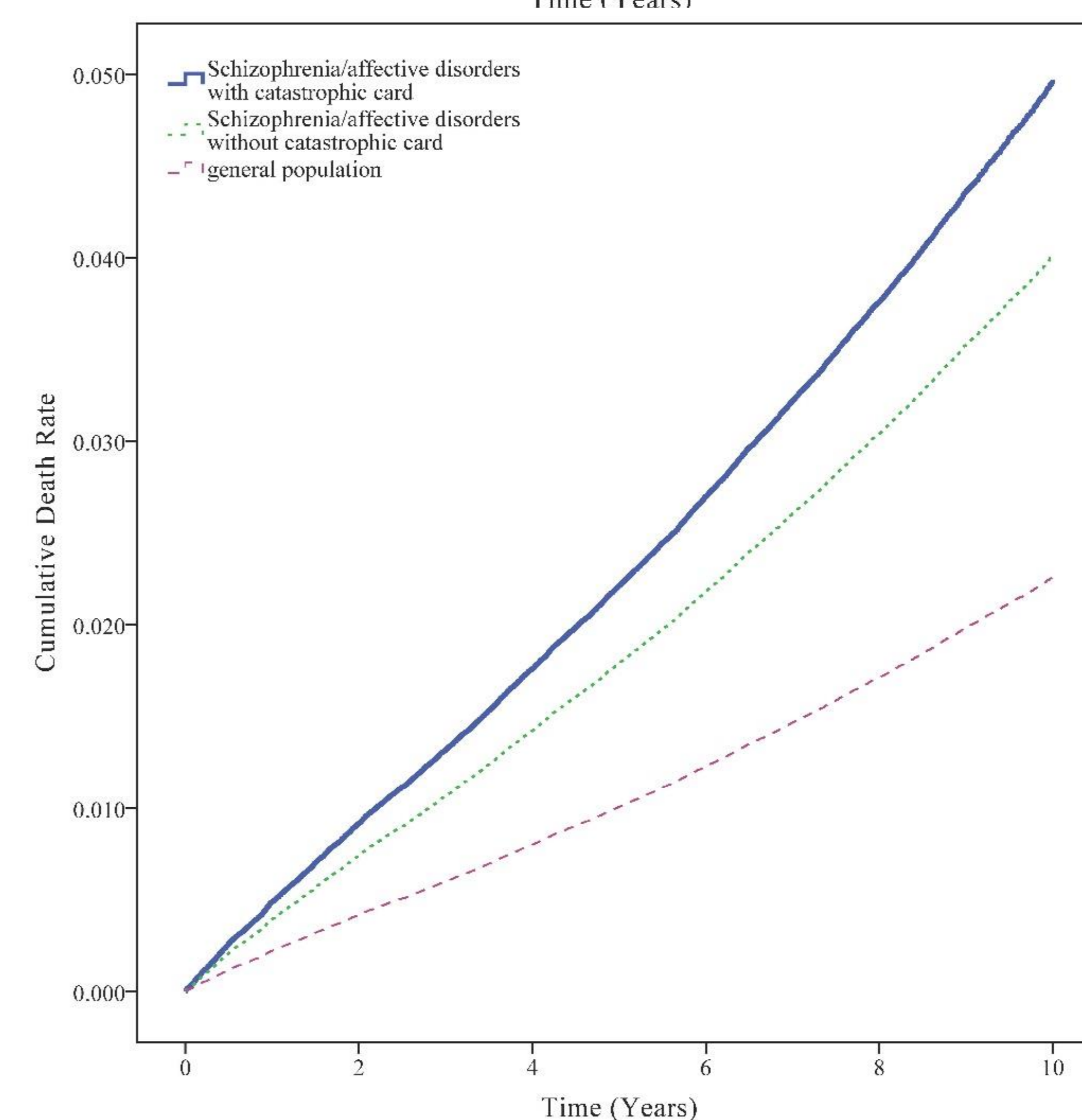
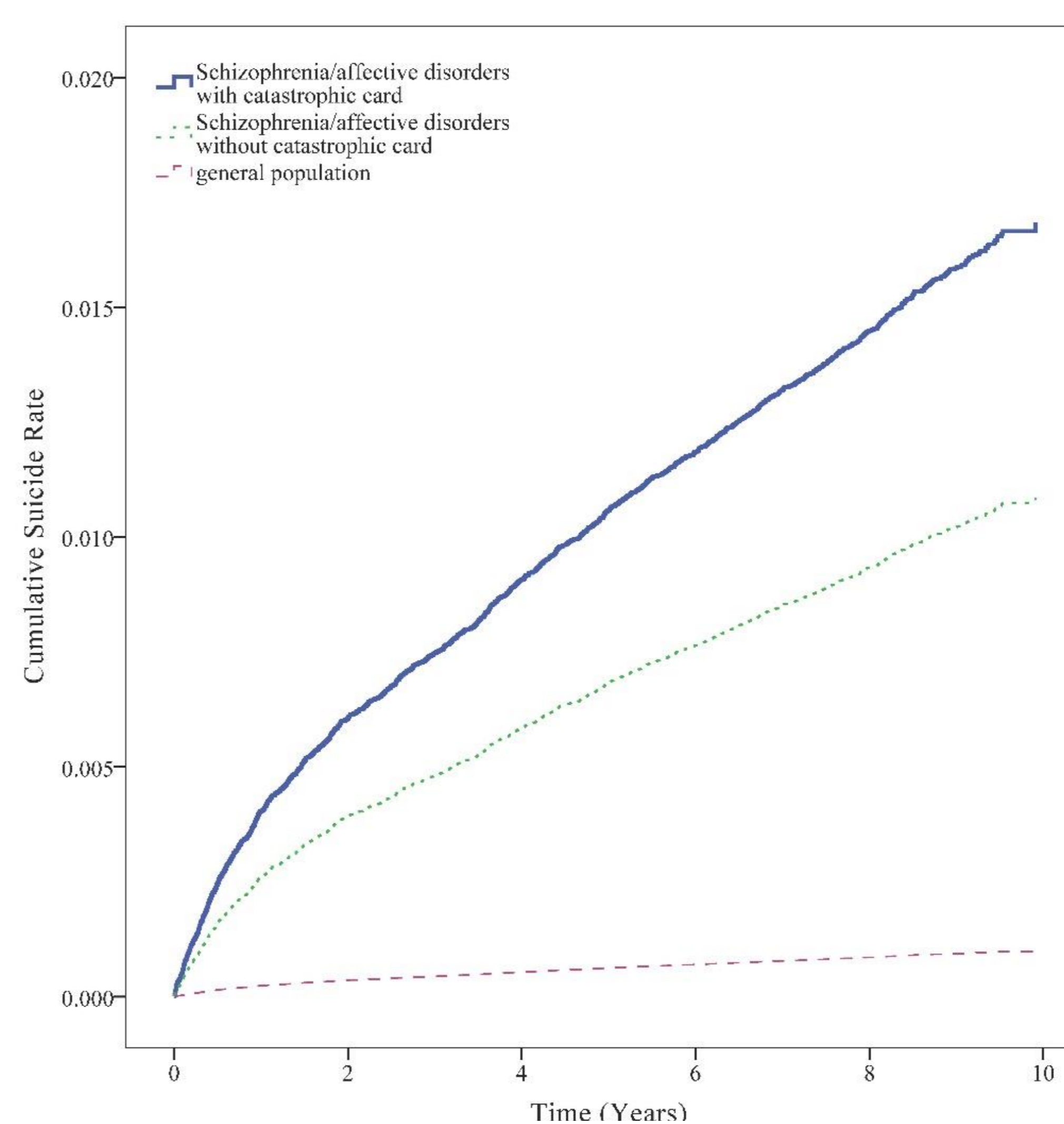
In this nationwide cohort study, we examined healthcare service usage among adults with and without SMI and explored the risk of stroke, suicide, and death.

## Methods

We divided 18–80-year-old adults with SMI into catastrophic and non-catastrophic illness groups. These groups were subjected to a 1:5:5 propensity score matching with a control group (people without SMI) for sex, age, and severity of comorbidities. Data on demographic characteristics, economic factors, environmental factors, comorbid conditions, and healthcare service utilization (self-injury behavior, the number of outpatients and ED visits, and hospitalization) were collected. The primary outcomes were risks of stroke, suicide, and death.

## Results

We included 19,570 people with catastrophic SMI, 97,850 with non-catastrophic SMI, and 97,850 controls. Patients with SMI, especially those with catastrophic illness certificates, had higher risks of stroke, suicide, and death than those without SMI. Moreover, people with SMI used health services more frequently than those without SMI. Patients with a history of hospitalization or ED access had a higher risk of stroke, suicide, and death.



## Conclusions

Our data indicate that special attention should be given to the physical and mental health of patients with SMI, particularly those with a history of healthcare service utilization, such as through longer hospital stays with high-intensity interventions.