Patients with psychiatric disorders, particularly affective disorders, had an increased risk of developing dementia

Kessing LV, Olsen EW, Mortensen PB, et al. *Dementia in affective disorder: a case-register study*. *Acta Psychiatr Scand* 1999 Sept;100:176–85.

QUESTION: Do patients with affective disorder have an increased risk of developing dementia compared with other groups of psychiatric patients and compared with the general population?

Design

Inception cohort followed up for a median of 21 years.

Setting

Population based study in Denmark.

Patients

3363 patients with unipolar affective disorder (mean age 51 y, 65% women), 518 patients with bipolar affective disorder (mean age 43 y, 56% women), 1025 patients with schizophrenia (mean age 32 y, 34% women), and 8946 patients with neurosis (mean age 41 y, 71% women). Patients were identified according to *ICD-8* diagnosis at the first ever discharge from a psychiatric hospital during 1970–4.

Assessment of prognostic factors

First ever discharge diagnosis from a psychiatric hospital was obtained using the Danish civil register which contains current information about every citizen of Denmark.

Main outcome measure

Diagnosis of dementia at discharge during the follow up period from April 1970 to December 1993. Information was obtained using the Danish Psychiatric Central Register.

Main results

448 patients were given a diagnosis of dementia. The risk of readmission with a diagnosis of dementia, adjusted for the competing risk of death, was different for the 4 groups of patients, with the same pattern for men and women. Patients with bipolar affective disorder were at greatest risk, followed by patients with unipolar affective disorder, patients with schizophrenia, and finally patients with neurosis. For example, a man who had been diagnosed as bipolar since he was 30 years old had an estimated 3.4% probability of being given a diagnosis of dementia before he reached the age of 60 years. The corresponding figures were 2.1% for a man diagnosed with unipolar affective disorder, 1.4% for a man diagnosed with schizophrenia, and 0.8% for a man diagnosed with neurosis. The probability of being given a diagnosis of dementia increased steadily with age for men, whereas the probability for women was low until the age of 70 years, and increased rapidly thereafter. Compared with the rate for sex and age matched samples of the general population, the rate of receiving a diagnosis of dementia increased 14.7-fold (95% CI 9.1 to 22.4) for patients with schizophrenia, 13.7-fold (CI 12.1 to 15.4) for patients with affective disorder, and 11.2-fold (CI 9.6 to 12.9) for patients with neurosis.

Conclusions

Patients with affective disorder, schizophrenia, and neuroses all had an increased risk of developing dementia compared with the general population. Among the patient groups, the affective disorders carried the greatest risk.

COMMENTARY

The outcome of psychiatric illness is of prognostic relevance to those with these illnesses. As related to the dementias, the demonstration of increased risk of developing dementia is relevant to our understanding of the disease process in dementia, may lead to treatment strategies, and ultimately may also be of benefit for preventing or, at the very least, delaying the onset of the dementias. The identification of predictors of the dementias will allow targeted preventive strategies in populations with expected higher incidences of dementia, thus decreasing the necessary sample size for research and maximising the clinical efficiency and safety of the intervention.¹ Evidence exists (largely from naturalistic and case control studies) that affective disorders, particularly those with late age at first onset² or accompanied by somewhat reversible cognitive impairment,³ imply a high risk for some causes of dementia. This study by Kessing *et al* adds to this evidence by using a large sample size with reasonable prognostic and outcome indicators over a long period of follow up.

The most important limitation of this study relates to the source of data. A registry of inpatient psychiatric discharge diagnoses leads to important potential selection biases both in formation of the cohorts and at outcome assessment. Additional limitations include the lack of assessment of the specific aetiology of dementia, and the fact that cohort status was changed for some subjects over the course of follow up.

Education and monitoring related to the possibility of developing dementia in these populations is appropriate.

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