Executive summary of completed research

The prognosis of major and minor depression in older medical inpatients

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THE PROGNOSIS OF MAJOR AND MINOR DEPRESSION IN OLDER MEDICAL INPATIENTS

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Introduction

Major and minor depression occur in 30-80% of older medical inpatients. However, few prior studies have investigated the prognosis of depression diagnoses in this population, in particular, the independent contribution of depression to subsequent morbidity and mortality after accounting for medical and functional status.

This prospective observational cohort study compared the 12 month outcomes of 3 groups of medical inpatients aged 65 or over: major depression, minor depression, and no depressive disorder. This study was one of three inter-related, concurrently conducted research projects that used the same follow-up schedule and measures (see Cost-Effectiveness of an Intervention for Depressed Elderly Medical Inpatients and Randomized trial of Geriatric Depression Service).

Objectives

The primary objective of the study was to investigate the independent role of depressive symptoms and disorders in the prediction of physical and mental functional status during the year following enrolment.

The secondary objectives of the study were:
1. To estimate the prevalence of depression diagnoses and identify associated factors.
2. To investigate the independent role of depressive symptoms and disorders in the prediction of the following outcomes during the year following enrolment: a) mortality; b) cognitive decline.
3. To estimate rates of persistent or new major and minor depression (DSM-IV) in the 3 cohorts at 3, 6 and 12 months after enrolment.
4. To describe the stability of severity of symptoms of depression over time in the 3 cohorts.
5. To investigate the impact of depressive disorders upon physical and mental functional status of the family caregiver.
6. To describe the recognition of depression by non-psychiatrist physicians both during and after the index hospital admission.
7. To determine risk factors for incident major depression

Methods

The study design was a prospective observational cohort study with clinical research assessments at enrollment, 3, 6, and 12 months of 3 groups of cognitively intact medical inpatients aged 65+: a major depression cohort and a minor depression cohort, in whom these diagnoses were made during the first few days of hospitalization, and a control group without a depressive disorder. Patients with a depression diagnosis were oversampled. Primary family caregivers were also invited to participate and interviewed at baseline, 6 and 12 months. The study was conducted at two university-affiliated hospitals in Montreal. Outcomes measurement was blind to the diagnostic group and study group. Clinical research data were linked to provincial administrative databases.
Results

Prevalence, incidence, and associated factors

• The prevalence of major depression was 14.2% in one hospital and 44.5% in the other. The prevalence of minor depression was similar in the two hospitals (9.4% and 7.9% respectively).¹
• The same characteristics (a history of depression, premorbid disability, cognitive impairment, perceived adequacy of support, and visits from friends) were associated with major and minor depression, although most of these associations tended to be weaker for minor depression.¹
• Among patients with no depression diagnosis or antidepressant medication at baseline, 30% developed major depression during 12-month follow-up.²

Course of depression

• Among patients with major depression at enrollment, most remained depressed with a protracted stable or protracted fluctuating course. Among patients with minor depression, most had a protracted course.³
• Depression symptom trajectories were similarly relatively stable, though about one third of patients in the mild or moderate/severe clusters improved over 12 months.⁴
• Baseline characteristics that predicted a more severe symptom trajectory included higher initial severity, female sex, depression symptoms lasting more than 6 months before admission, and moderate premorbid disability.⁴
• In the short-term, core depressive symptoms (depressed mood, loss of interest or pleasure) were more stable than the other depressive symptoms. The presence of moderate-to-severe depressive symptoms, moderate-to-severe disability, and depression symptoms of ≥6 months’ duration were associated with a higher short-term stability of diagnosis.⁵

Outcomes

• Among patients with no history of depression, a depression diagnosis did not independently predict survival, after adjustment for confounding by physical illness and other factors. In contrast, among patients with a history of depression, major depression and was actually associated with increased survival, even after adjustment for demographic factors, physical illness and other factors.⁶
• Major depression at admission was an independent predictor of poorer physical and mental quality of life.⁷
• After adjusting for age, illness severity, baseline physical and cognitive function, and other covariates, greater depression symptom severity was associated with a lower cognitive score at the same time points, but not at subsequent time points.⁸ A baseline diagnosis of depression independently predicted poorer cognitive status at 12 months.⁹

Impact on family caregivers

• Major depression was associated with significantly increased time spent by non-coresident caregivers on emotional support; minor depression was associated with perceived inadequacy of support. Neither major nor minor depression was associated with time spent by family caregivers on physical support.¹⁰
• In comparison with caregivers of patients without a current diagnosis of depression, caregivers of those with major depression had a lower mental health score at follow-up. 11

Recognition of depression
• During their hospitalization, less than half of depressed patients were recognized by attending physicians. The indicator of recognition with the highest sensitivity was treatment, whereas the indicator with the best specificity was diagnosis. Less comorbidity, more severe depression symptoms, a history of depression, longer hospital stay, and antidepressant use before admission were significantly associated with better global recognition. 12
• During the 12 months after admission, recognition rates in primary care settings ranged up to 61% among patients with persistent major depression and 36% among patients with fluctuating major depression. A greater number of primary physician visits and prescription of a psychotropic medication (non-antidepressant) were independently associated with greater recognition. 13

Discussion
The prognosis of both major and minor depression in older medical inpatients is poor and worse than previously thought. The negative effects of a depression diagnosis during medical hospitalization on patient health status persist for at least 12 months. Their family caregivers experience poorer mental health for at least 6 months. Depression is frequently not recognized by hospital and community non-psychiatrist physicians. These findings support the need to evaluate improved methods of detection and management of depression in this population, both during and after hospital admission
References


