

Effects of anxiety and depression and early detection and management of emotional distress on length of stay in hospital in non-psychiatric inpatients in China: a hospital-based cohort study

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Abstract

Background Emotional distress, including anxiety and depression, is associated with negative outcomes (such as poorer prognosis of physical diseases, longer hospital stays, and more readmissions) of patients in non-psychiatric settings. We investigated the effects of anxiety and depression, as well as the effects of early detection and management of emotional distress, in non-psychiatric inpatients on length of stay in hospital, with the aim of better informing the provision of medical care to meet the needs of non-psychiatric patients receiving general hospital care.

Methods This real-world hospital-based cohort study included inpatients (aged ≥ 15 years) from 20 non-psychiatric departments in West China Hospital. The Huaxi emotional-distress index (HEI), a validated questionnaire for screening depression and anxiety in Chinese non-psychiatric clinical settings, was recommended for use in brief screening of non-psychiatric inpatients on their admission to hospital. Patients with depression or anxiety were provided with a graded psychological service, ranging from brief supportive care (for mild distress [HEI score 9–12]) to treatment by a psychiatrist or psychotherapist (for severe distress [HEI score ≥ 17]). Patients were grouped on the basis of whether brief screening and graded psychological service was provided (BS-GPS group) or not (non-BS-GPS group). Length of stay was compared between the groups and between patients with and without clinically significant anxiety or depression.

Findings From Jan 1, 2015, to Dec 31, 2018, 487 871 patients admitted to 20 non-psychiatric departments were included in the study, of whom 178 883 (36.7%) patients underwent brief screening on admission (BS-GPS group) and 308 988 (63.3%) patients were not screened (non-BS-GPS group). Across all departments, 9590 (5.4%) patients in the BS-GPS group (range 2.6–20.5% across departments) showed clinically significant anxiety or depression (ie, total HEI score ≥ 11). Mean length of stay differed significantly between patients with (12.7 days [SD 0.12]) and without (9.5 days [0.02], $p < 0.0001$) clinically significant anxiety or depression, and between the BS-GPS group (9.6 days [0.02]) and the non-BS-GPS group (10.8 days [0.02], $p < 0.0001$). These differences remained significant after controlling for sociodemographic factors and categories of physical diseases.

Interpretation Anxiety and depression significantly prolonged the length of stay of non-psychiatric inpatients in general hospital. Early detection and management of emotional distress should be promoted and applied to better care for patients with non-psychiatric disorders and to conserve medical resources.

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Contributors

TL, W-JG, and LZ conceptualised the study. W-JG, H-YW, WW, and XS did the statistical analysis. W-JG, TL, and H-YW wrote the abstract. All the authors were involved in data collection and abstract revision, and read and approved the final version of the abstract for publication.

Declaration of interests

We declare no competing interests.

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