

Ten-year trend of pharmacological treatment for depression in Taiwan

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Background

Background. Depression is a prevalent and disabling disease affecting more than 300 million people worldwide and has been one of the leading causes of non-fatal health loss for more than two decades (World Health Organization, 2017). Despite that effective treatments and guidelines based on robust evidence are available, depression remains highly underdiagnosed and undertreated (Duhoux et al., 2011, Falagas et al., 2007). In the recent decades, there is an increasing number of psychiatrists working in community clinics. One concern was that an oversupply of physicians might induce unnecessary utilisation of health care (Ryan and Mooney, 1992, Tsai, 2002). On the other hand, the demand for mental health care also increased. Multi-wave nationwide surveys showed that the prevalence of potential common mental disorders doubled from 1990 to 2010 (Fu et al., 2013).

The impact of changes in mental health services and increase in the number of psychiatrists and community psychiatric clinics on the quality of depression treatment in the Taiwanese population has never been studied.

Aims & Objectives

The present study aimed to investigate the trend and quality of depression treatment between 2007 and 2016 in Taiwan.

Methods

We used the claims database derived from Taiwan's National Health Insurance (NHI) program, in which approximately 23.0 million individuals were enrolled, translating to a coverage rate of 99%. Patients with depressive disorders were identified based on International Classification of Diseases codes. The process indicators of depression care quality included visit, duration, and dose adequacy. The outcome indicators included the rate of psychiatric hospitalisation, emergency visit, self-harm hospitalisation, and suicide.

The prescription pattern was further classified based on the number of antidepressants used, types of antidepressants (selective serotonin reuptake inhibitors [SSRIs], tricyclic or tetracyclic antidepressants [TCAs]; serotonin norepinephrine reuptake inhibitors [SNRIs], and other antidepressants), and adjuvant therapy, including benzodiazepine, mood stabilisers (lithium, valproic acid, carbamazepine, and lamotrigine), and second-generation antipsychotics.

Results

The prevalence of treated depressive disorders increased from 1.61% in 2007 to 1.92% in 2016, i.e., a 25% increase, whereas the incidence of first-ever or recurrent depressive disorder did not change significantly. The number of patients treated by psychiatrists and in community clinics also increased. The quality of depression care improved, the proportion of patients receiving minimum psychiatric clinic follow-up and adequate medication increased.

In term of treatment pattern, patients treated by psychiatrists (1.53-fold increase) and in community clinics (2.07-fold increase) increased after adjustment for demographic variables. The quality of depression care improved in all process indicators, including visit, dose, and duration adequacy. The proportion of patients not receiving antidepressants decreased from 19.8% to 15.5%. In terms of antidepressant types, SSRIs remained the most commonly prescribed medication and showed an increasing trend in prescription rate over the study period. Other antidepressants except TCAs, moclobemide, and trazodone also showed a similar trend. Among other psychotropics, the prescription rate of sedatives/hypnotics and mood stabilizers declined, while the use of second-generation antipsychotics doubled from 6.0% to 12.7%.

The treatment outcome indicators showed that the rate of emergency visits, psychiatric hospitalisation, and self-harm hospitalisation declined.

Discussion & Conclusion

This nationwide population-based study, we found a large increase in psychiatrists working in community clinics was observed. According to treatment process and outcome indicators, depression treatment has been improving in quality, which may be associated with the increased accessibility by an increased number of psychiatrists and community psychiatric clinics. The causality warrants further investigations.