

Abstract

Background: Safety monitoring of medicines is essential during therapy for bipolar disorder (BD). We determined the extent of safety monitoring performed according to the International Society for Bipolar Disorders (ISBD) guidelines in patients with BD attending the main tertiary care psychiatry clinics in Sri Lanka to give realistic recommendations for safety monitoring in resource limited settings.

Methods: Patients diagnosed with BD on mood stabilizer medications for more than 1 year were recruited. Data were collected retrospectively from clinic and patient held records and compared with the standards of care recommended by ISBD guidelines for safety monitoring of medicines.

Results: Out of 256 patients diagnosed with BD, 164 (64.1%) were on lithium. Only 75 (45.7%) had serum lithium measurements done in the past 6 months and 96 (58.5%) had concentrations recorded at least once in the past year. Blood urea or creatinine was measured in the last 6 months only in 30 (18.3%). Serum electrolytes and thyroid-stimulating hormone (TSH) concentrations were measured in the last year only in 34 (20.7%) and 30 (18.3%) respectively. Calcium concentrations were not recorded in any patient. None of the patients on sodium valproate ($n = 119$) or carbamazepine ($n = 6$) had blood levels recorded to establish therapeutic concentrations. Atypical antipsychotics were prescribed for 151 (59%), but only 13 (8.6%) had lipid profiles and only 31 (20.5%) had blood glucose concentration measured annually. Comorbidities experienced by patients influenced monitoring more than the medicines used. Patients with diabetes, hypothyroidism and hypercholesterolemia were more likely to get monitored for fasting blood glucose and ($p < 0.001$), TSH ($p < 0.001$) and lipid profiles ($p < 0.001$). Lithium therapy was associated with TSH monitoring ($p < 0.05$). Therapy with atypical antipsychotics was not associated with fasting blood glucose or lipid profile monitoring ($p > 0.05$). A limitation of the study is that although some tests were performed, the results may not have been recorded.

Conclusions: Safety monitoring in BD was suboptimal compared to the ISBD guidelines. ISBD standards are difficult to achieve in resource limited settings due to a multitude of reasons. Realistic monitoring benchmarks and recommendations are proposed for methods to improve monitoring in resource limited settings based on our experience.