An investigation of comorbid bipolar disorder and post-traumatic stress disorder in the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD) cohort.

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Background

Post Traumatic Stress Disorder (PTSD) is more prevalent in the those with Bipolar Disorder (BD) compared to the general population, with rates as high as 55% in some BD cohorts. Despite this, tailored effective pharmacotherapy has not been explored in those with comorbid BD and PTSD

Methods

The Systematic Treatment Enhancement Program for BD (STEP-BD) cohort was utilized to examine symptoms and pharmacotherapy between those with BD alone (n=3393), and those with comorbid BD and PTSD (n=304). Regression models were used to explore measures of depression, mania, functioning and quality of life over 24 months of the STEP-BD study in people with BD compared to those with comorbid BD and PTSD. Baseline pharmacotherapies (lithium, valproate, antidepressants, antipsychotics, and benzodiazepines) were utilized as a predictor outcome variable in all models.

Results

Differences were reported in people with BD alone compared to those with comorbid PTSD in measures of depression, mania, functioning and quality of life in all pharmacotherapy models. Specifically, those with comorbid PTSD experienced worse symptoms and outcomes, irrespective of pharmacotherapy treatment. Significant results report a number of improvements in BD alone symptoms for lithium (figure 1a, 1b, 1c), valproate (figure 1d), antidepressants (Figure 1e, 1f, 1g, 1h) and antipsychotic use (Figure 1i). Benzodiazepine use reported poorer outcomes in BD alone for depression, mania and quality of life (Figure 1j, k, l). Comorbid PTSD reported a minor improvement in depression scores (figure 1j) and worse quality of life scores with benzodiazepine use (Figure 1l).

Table 1: Participant demographics split by bipolar disorder alone and comorbid PTSD.

Factor		Bipolar disorder alone	Comorbid PTSD
N		3393	304
Age, Mean (SD)		39.72 (12.98)	40.16 (11.82)
Sex, n (%)	Female	1864 (56.6%)	205 (69.3%)
Marital status, n (%)	Married	2180 (64.2%)	222 (73.0%)
Lifetime psychosis, n (%)	Yes	1222 (37.2%)	**130 (44.5%)**
Age at first episode, Mean (SD)		21.65 (10.02)	19.60 (10.12)
Medical Insurance status, n (%)	Yes	2694 (82.8%)	**223 (76.6%)**
Baseline symptom measures, Means, (SD)			
MADRS (depression)		15.62 (10.76)	**23.27 (10.03)**
YMRS (mania)		6.77 (6.52)	**10.54 (7.94)**
RIFT (functioning)		11.49 (3.82)	**13.39 (3.34)**
Q-LES-Q-SF (quality of life)		42.06 (11.43)	**34.74 (9.89)**
Baseline pharmacotherapy use, n (%)			
Lithium	Yes	1088 (32.1%)	**65 (21.4%)**
Valproate	Yes	1025 (30.3%)	86 (28.3%)
Antidepressants	Yes	1521 (44.8%)	**162 (53.3%)**
Antipsychotics	Yes	1006 (29.6%)	**121 (39.8%)**
Benzodiazepines	Yes	794 (23.4%)	**102 (33.6%)**

Note: **Bold** results indicate significant *p* values. *Abbreviations:* MADRS – Montgomery Åsberg Depression Rating Scale, YMRS – Young Mania Rating Scale, RIFT - The Range of Impaired Functioning Tool , Q-LES-Q-SF - The Quality of Life, Enjoyment, and Satisfaction Questionnaire-Short Form, SD – Standard Deviation.

Conclusion

Results highlight the importance of considering comorbidity in the treatment of mental health conditions, specifically BD. This study also emphasizes the need for a better understanding of this comorbidity to ensure individuals achieve recovery and improve symptoms and quality of life.

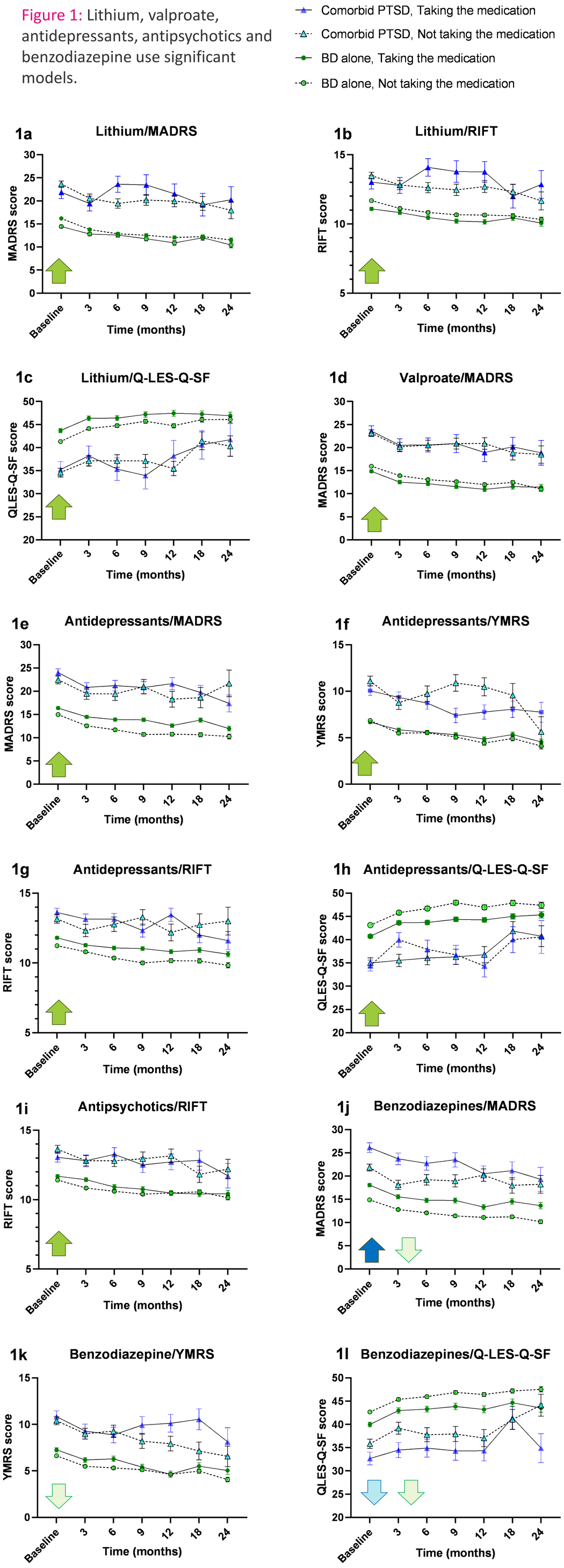
= BD group improved symptom scores

= BD group poorer symptom scores

= Comorbid PTSD group improved symptom scores

= Comorbid PTSD group poorer symptom scores

Figure 1: Lithium, valproate, antidepressants, antipsychotics and benzodiazepine use significant models.



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