Improving Quality Of Life, Functioning, And Well-Being In Individuals Living With Bipolar Disorder

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Our Featured Speaker

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Professor, Case Western Reserve
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Our Moderator

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Objectives

Provide an overview of disease burden and quality of life (QoL) in individuals living with bipolar disorder (BD)

Discuss the factors associated with QoL in individuals living with BD

Review current approaches to improving QoL in individuals living with BD and their outcomes

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Section 1:
Bipolar Disorder (BD) Disease Burden

- Why is QoL compromised in individuals living with BD?
- What are the determinants of QoL in individuals living with BD?
- How is QoL measured in individuals living with BD?

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Introduction To Bipolar Disorder

Bipolar disorder (BD) is an episodic and lifelong illness characterized by dramatic shifts in mood, energy, and activity levels that affect an individual's ability to carry out normal everyday tasks[1,2]

Categories and Types of BD[3]

Bipolar I disorder:
Manic or mixed features with or without psychosis and/or major depression

Bipolar II disorder:
Hypomania with major depression; no history of mania, but can have a history of hypomania

Cyclothymic disorder :
Recurring hypomanic and depressive symptoms that are not intense enough or do not last long enough to qualify as hypomanic or depressive episodes.

Mood changes in patients with BD may include manic, depressive, and mixed episodes[2,3]

Symptoms of a Manic Episode	Symptoms of Hypomania	Symptoms of a Depressive Episode
• Feeling up, high, elated • Extreme irritability • Feeling jumpy or wired • Increased activity • Decreased need for sleep • Fast talking, racing thoughts • Feeling able to perform multiple tasks without fatigue • Feeling unusually important, talented, or powerful	• Inflated self-esteem or grandiosity • Decreased need for sleep • More talkative than usual • Flight of ideas • Distractibility • Increase in goal-directed activities • Excessive involvement in potentially painful or dangerous activities	• Feeling down, sad or anxious • Feeling restless or slowed down • Sleeping too little or too much, having trouble falling asleep • Talking slowly, inability finding things to say • Difficulty concentrating or making decisions • Feeling unable to perform simple tasks • Lack of interest in most activities • Suicidal ideation

BD, bipolar disorder.

1. American Psychiatric Association Working Group on Bipolar Disorder. Practice guideline for the treatment of patients with bipolar disorder. 2nd ed. 2010. Available at: https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/bipolar.pdf. Accessed April 22, 2024.
2. National Institute of Mental Health. Bipolar disorder. Available at: https://www.nimh.nih.gov/health/topics/bipolar-disorder. Accessed April 22, 2024.
3. Marzani G and Neff AP. *Am Fam Physician*. 2021;103(4):227-239.

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Symptom Domains Of Bipolar Disorder

Manic Mood and Behavior	Dysphoric Mood and Behavior	Cognitive Symptoms	Psychotic Symptoms
• Euphoria • Grandiosity • Pressured speech • Impulsivity • Excessive libido • Diminished need for sleep • Increased energy • Paranoia	• Depression • Anxiety • Irritability • Hostility • Violence or suicide	• Racing thoughts • Distractibility • Disorganization • Inattentiveness	• Delusions • Hallucinations

1. Goodwin FK, et al. *Manic-Depressive Illness*. New York, NY: Oxford University Press; 2007.

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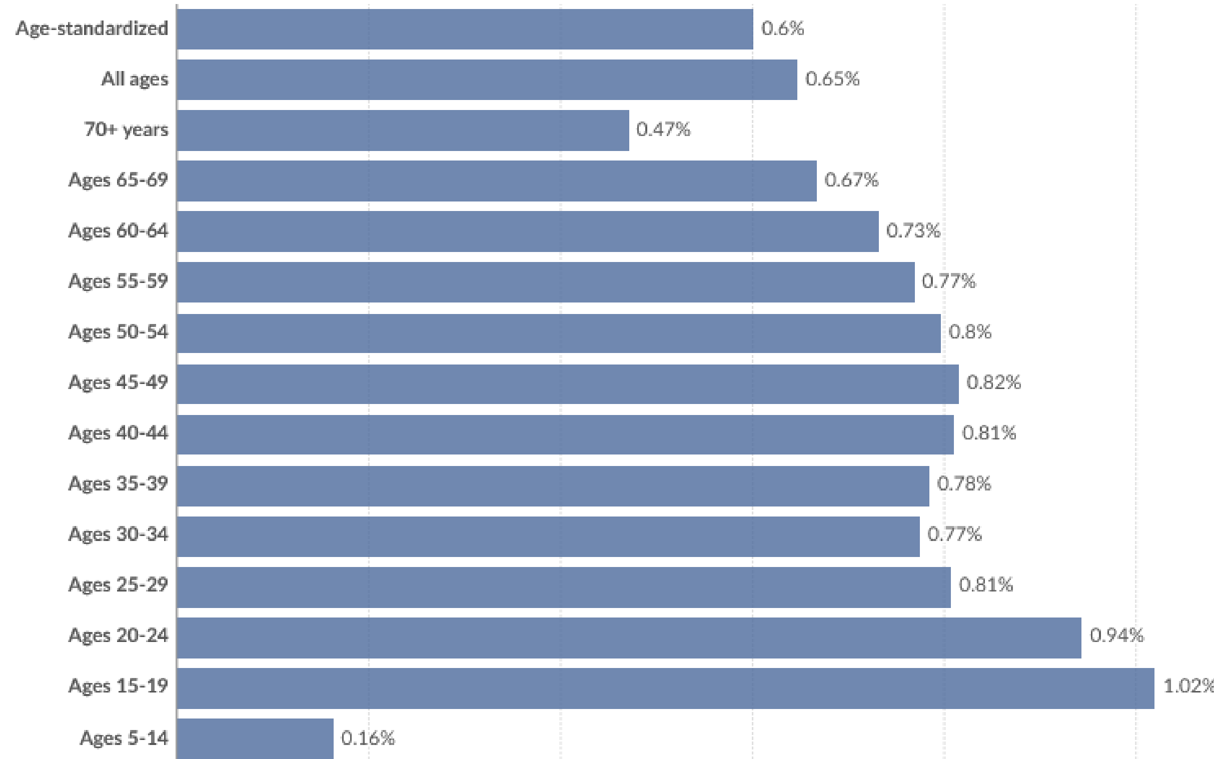
Prevalence Of BD In The United States

Bipolar disorder prevalence, by age, United States, 2019[3]



5.7 million adult Americans

BD affects about 5.7 million adult Americans, or about 2.8% of the U.S. population age 18 and older every year.[1,2]

4.4% United States population

An estimated 4.4% of the United States population experience BD at some time in their lives.[1,2]

13 years ↓

Average reduction in lifespan in individuals living with BD[4]

BD, bipolar disorder.

1. Hirschfeld RMA, et al. American Psychiatric Association Working Group on Bipolar Disorder. Practice guideline for the treatment of patients with bipolar disorder. 2nd ed. 2010. Available at: https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/bipolar.pdf. Accessed April 22, 2024.
2. National Institute of Mental Health. Bipolar Disorder. Available at: https://www.nimh.nih.gov/health/topics/bipolar-disorder. Accessed April 22, 2024.
3. Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2020. Available from https://ourworldindata.org/grapher/bipolar-disorder-prevalence-by-age?country=~USA. Accessed May 9, 2024.
4. Chan JKN, et al. *Br J Psych.* 2022;221:567-576.

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Disease Burden Of Individuals Living With BD

QoL is Compromised in Multiple Domains in Individuals Living with BD[1,a]

BELP subscale domain[b]	BD patients (N=60; mean)	Controls (N=77; mean)	Comparison (p value)
Overall QoL	4.59	6.01	<0.001
Work/occupation	4.53	5.22	0.007
Leisure time	4.65	5.50	0.001
Financial	4.25	5.20	0.002
Housing	5.51	6.07	0.139
Safety	6.34	6.25	0.515
Family	5.45	6.12	<0.001
Friends	5.25	6.27	<0.001
Physical health	5.13	5.66	0.013
Mental health	4.41	6.35	<0.001

BD, bipolar disorder; QoL, quality of life.
[a]Based on an analysis of 137 BD patients and controls.
[b]Berliner Lebensqualitätsprofil scale (range, 1-7). BELP is the German version of the Lancashire Quality of Life Profile.

The Burden of BD may be Increased in Marginalized Communities[2,3]

Delayed Diagnosis

Treatment Disparities

Correlates of Lower QoL in individuals Living with BD[4]

- Higher body mass index
- Smoking
- Untreated anxiety/agitation
- Previous hospitalizations
- Inactive lifestyle
- Longer BD duration without mood stabilization
- Untreated epilepsy/seizures

1. Post F, et al. *Journal of Affective Disorders*. 2018;238:399-404.
2. Akinhanmi MO, et al. *Bipolar Disorders*. 2018;20(6):506-514.
3. Tchikrizov V, et al. *Personalized Medicine in Psychiatry*. 2023;37:100101.
4. Maripuu M, et al. *Neurology, Psychiatry and Brain Research*. 2019;34:34-40.

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QoL Is Compromised Across The BD Spectrum

Remitted BD is Associated with Significant Functional Impairment[1,a]

	Remitted BD vs. Controls (95% OR)
Generalized anxiety disorder	3.40
Post-traumatic stress disorder	4.91
Alcohol use disorder	1.78
Any substance use disorder	2.65
Panic disorder	2.94
Any medical comorbidity	1.34
Incarceration history	2.50
Homelessness history	2.54
Lifetime suicide attempt	3.94

OR, odds ratio.
[a]Data are from National Epidemiologic Survey on Alcohol and Related Conditions Wave III (NESARC-III).

HRQoL and QALYs by BD status[1,a]

	Controls (N=35,556)	Remitted BD (N=187)	Current BD (N=566)
Mental component summary[b]	50.6 ± 10.1	46.4 ± 10.8	40.0 ± 13.0
Physical component summary[b]	49.4 ± 10.6	46.4 ± 12.4	47.8 ± 11.8
Quality-adjusted Life Year (EuroQOL-5D)	0.89 ± 0.12	0.85 ± 0.13	0.80 ± 0.15

HRQoL, Health-related quality of life; QALYs, quality-adjusted life-years.
[a]Data are from National Epidemiologic Survey on Alcohol and Related Conditions Wave III (NESARC-III)
[b]12-item Short Form Survey

BD, bipolar disorder; QoL, quality of life.

1. Rhee TG, et al. *J Affect Disorders*. 2023;321:33–40.

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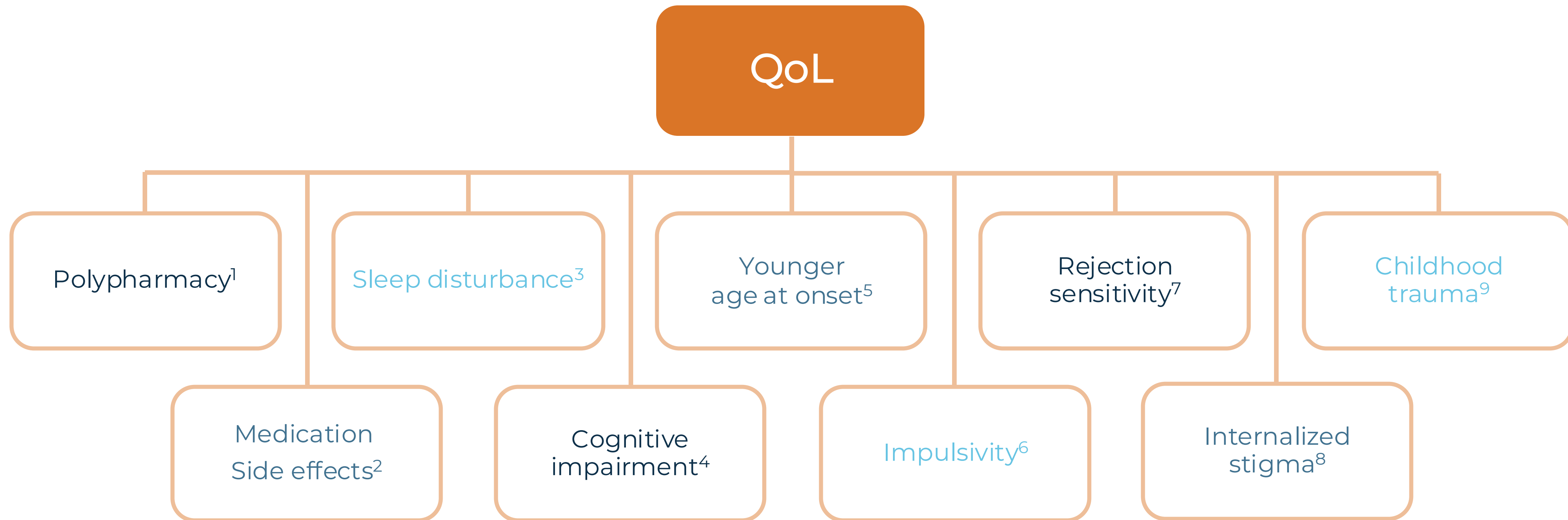
Multiple Aspects Of BD Are Associated With Decreased QoL



BD, bipolar disorder; QoL, quality of life.

1. Fung VC, et al. *J Affect Disord*. 2019;257:17.
2. Shah A, et al. *J Clin Diag Res*. 2017;11(5):24-28.
3. Steinan MK, et al. *Acta Psychiatr Scand*. 2016;133(5):368-377.
4. Xiao L, et al. *Psych Res*. 2016;246:427.
5. IsHak WW, et al. *Bipolar Disord*. 2012:14(1):6-18.
6. Santana RP, et al. *Brain Sci*. 2022;12(10):1351.
7. Ng TH, et al. *Cogn Ther Res*. 2013;37:1169-1178.
8. Latifian M, et al. *Int J Bipolar Disorders*. 2023;11:9.
9. Aas M, et al. *Int J Bipolar Disord*. 2016;4(1):2.

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Section 2:

Approaches To Improving QoL In Individuals Living With BD

- How do multicomponent programs contribute to overall QoL in individuals living with BD?
- How can patients be proactive in the self-management of their experiences living with BD?

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Methods To Improve QoL In BD Involve A Holistic Approach

- Integrative approaches to treating BD may improve the QoL in individuals living with BD, including those experiencing BD I[1,2]
- Multicomponent programs involving pharmacological interventions, collaborative care with HCPs, and approaches to individual self-management contribute to a holistic treatment[1-3]

BD, bipolar disorder; QoL, quality of life.

1. Bonnín C, et al. *Int J Neuropsychopharmacol*. 2019;22(8):467-477.
2. Post F, et al. *J Affect Disord*. 2018;238:399-404.
3. Keyes CL, et al. *Am J Public Health*. 2010;100(12):2366-2371.

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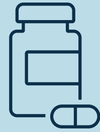
Pharmacological Interventions May Help To Improve Outcomes

To help improve clinical and functional outcomes and eventually, the QoL of individuals living with BD, HCPs may consider the following:



Reducing medication burden and optimizing adherence[1,2]

Improve adherence with alternative drug-delivery formats, including LAIs

Monitoring side effects[3]

Factor in possible side effects when selecting a pharmacological treatment

Reducing residual depressive symptoms[4]

Treatment of residual symptoms during euthymia is an unmet need

Addressing barriers to appropriate treatment[2]

Individual-specific and external barriers should be identified and targeted

While medications may effectively manage mood symptoms, combining pharmacotherapy with psychosocial interventions is essential for improving QoL[3,4]

HCPs, healthcare providers; LAIs, long-acting injectables; BD, bipolar disorder; QoL, quality of life.

1. van Dulmen S, et al. *BMC Health Serv Res.* 2008;8:47.
2. Levin JB, et al. *CNS Drugs.* 2016;30:819-835.
3. IsHak WW, et al. *Bipolar Disord.* 2012;14(1):6-18.
4. Bonnín C, et al. *Int J Neuropsychopharmacol.* 2019;22(8):467-477.

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Improved Clinical Outcomes In Individuals Living With BD With Pharmacological Treatment

Research on pharmacological treatment to restore psychosocial functioning in BD is ongoing, but when left untreated, mood symptoms may worsen and become more frequent—highlighting a need for treatment to improve HRQoL[1,2]

Evidence from a meta-analysis of 6 mirror-image studies suggest LAIs may be an effective strategy to improve clinical outcomes[3,*]

- LAI treatment is associated with a decrease in days spent in hospitals, hospitalization rates, and emergency department visits
- Treatment is likely to reduce the number of relapses

In a 6-month prospective, uncontrolled trial of 30 individuals living with BD, LAI combined with CAE intervention showed better adherence[4,†]

- Proportion of missed medications in the past week from screening to 24 weeks significantly improved
- Significant improvements were demonstrated on the BPRS, MADRS, YMRS, CGI, SOFAS, and GAF

BD, bipolar disorder; BPRS, Brief Psychiatric Rating Scale; CAE, customized adherence enhancement; CGI, Clinical Global Impressions; GAF, Global Assessment of Functioning; HRQoL, health-related quality of life; LAI, long-acting injectable; MADRS, Montgomery-Asberg Depression Rating Scale; SOFAS, Social and Occupational Functioning Assessment Scale; YMRS; Young Mania Rating Scale.
*Clinical outcomes were defined as the number of days spent in hospital, number of hospital admissions, hospitalization rates (proportion of individuals with at least one hospital admission), acute mood (manic or depressive) relapses, and number of emergency department visits.[3]
†Customized adherence enhancement is a brief behavioral intervention consisting of a series of 4 psychosocial treatment modules based on the individual's medication adherence barriers: psychoeducation on BD medications, communication with providers, strategies to enhance medication routines, targeting substance use problems with modified motivation enhancement therapy.[4]

1. Bonnín C, et al. *Int J Neuropsychopharmacol.* 2019;22(8):467-477.
2. IsHak WW, et al. *Bipolar Disord.* 2012;14(1):6-18.
3. Bartoli F, et al. *Ther Adv Psychopharmacol.* 2023;13:20451253231163682.
4. Sajatovic M, et al. *Prim Care Companion CNS Disord.* 2021; 23(5): 20m02888.

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Approaches To Restore Psychosocial Functioning

Specialized and interdisciplinary care, in conjunction with pharmacological treatment, work to improve functional outcomes and increase QoL[1]

Cognitive behavioral therapy (CBT)[2]

- Studies suggest long-term CBT combined with psychoeducation and pharmacological treatment may work to provide significant improvements in HRQoL and psychosocial functioning

Psychoeducational intervention

- Guideline-recommended adjunctive treatment to pharmacotherapy[3,4]
- Studies have shown improvements in QoL when individuals and their caregivers are given information about BD, including early warning signs of BD episodes, stress management, and relapse prevention[4,5]

Behavioral adherence promotion[6]

- Customized adherence engagement involving modules based on an individual's adherence barriers was shown to improve adherence, functioning, and mental health resource use in comparison to a BD-specific educational program

Shared-decision making bridges the gap between clinician expertise and patient experience—fostering a collaborative partnership crucial for long-term care success[5]

BD, bipolar disorder; HRQoL, health-related quality of life; QoL, quality of life.

1. Bonnín C, et al. *Int J Neuropsychopharmacol*. 2019;22(8):467-477.
2. IsHak WW, et al. *Bipolar Disord*. 2012;14(1):6-18.
3. APA, Treatment of patients with bipolar disorder. https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/bipolar.pdf. Accessed April 22, 2024.
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5. Levrat V, et al. *Front Psychiatry*. 2024;14:1320654.
6. Sajatovic M, et al. *J Clin Psychiatry*. 2018;79(6):17m12036.

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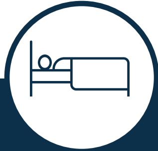
Healthy Mind, Healthy Body Strategies To Improve Functional Outcomes And QoL



Educate and train individuals living with BD to improve sleep hygiene[1]

Poorer sleep quality has been associated with functional impairment

Incorporate digital therapeutics[2,3]

- Evidence suggests psychosocial therapies that monitor mood and sleep in real time may reduce symptoms, prevent relapse and recurrence of BD episodes, and improve QoL
- Smartphone applications show promise to improve access to psychosocial support from HCPs and self-management strategies, leading to more timely and personalized interventions
- Available smartphone-based interventions have demonstrated that they may improve the QoL of individuals with BD, but further research is warranted

Improve nutritional habits and promote a more active lifestyle[1]

Poor diet and a sedentary lifestyle contribute to physical and psychiatric morbidity, decreased psychosocial functioning, and poorer response to pharmacological treatment

Manage and monitor psychiatric comorbidities, including promoting healthier habits (i.e., smoking cessation)[1,4]

Substance abuse disorders, along with personality disorders, may influence functional outcomes

Inform individuals and their families of advocacy groups such as DBSA and NAMI[5]

Advocacy groups offer invaluable materials and support to empower individuals

BD, bipolar disorder; DBSA, Depression and Bipolar Support Alliance; HCPs, healthcare providers; NAMI, National Alliance on Mental Illness; QoL, quality of life.

1. Bonnín C, et al. *Int J Neuropsychopharmacol*. 2019;22(8):467-477.
2. Morton E, et al. *Int J Bipolar Disord*. 2022;10(1):10.
3. Goulding EH, et al. *JAMA Psychiatry*. 2023;80(2):109-118.
4. IsHak WW, et al. *Bipolar Disord*. 2012;14(1):6-18.
5. APA, Treatment of patients with bipolar disorder. https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/bipolar.pdf. Accessed April 22, 2024.

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Summary

BD has a significant negative impact on overall health, psychosocial functioning, and other measures of QoL

QoL is compromised at all stages of BD and is associated with characteristics such as polypharmacy, sleep disturbance, and cognitive impairment

Improvements in QoL for individuals living with BD involve collaboration between healthcare providers, the individuals, and their families to develop a personalized and appropriate treatment plan consisting of pharmacological and psychosocial interventions

- Holistic healthcare in individuals living with BD I should be applied to improve their quality of life, even when they experience mild symptoms

BD, bipolar disorder; QoL, quality of life.

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Appendix

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The QoL.BD Scale: A Closer Look

Subscales of the QoL.BD scale[1]

- Physical
- Sleep
- Mood
- Cognition
- Leisure
- Social
- Spirituality
- Finances
- Household
- Self-esteem
- Independence
- Identity
- Work*
- Education*

*Optional subscales

The QoL.BD scale is designed to[1]:

- Work effectively across the mood states observed in BD (depression, mania, hypomania, mixed states, euthymia)
- Work effectively across BD diagnostic categories (BD 1, BD 2, bipolar spectrum disorders)
- Be concise enough for use in routine clinical practice
- Be sensitive to changes in QoL in response to pharmacological or psychosocial interventions

The QoL.BD scale has been adapted into 14 languages and one alternate (web-based) format[2]

BD, bipolar disorder; QoL, quality of life.

1. Michalak EE, et al. *Bipolar Disord*. 2010:12(7):727–740.
2. Morton E, et al. *J of Affect Disord*. 2021;278:33–45.

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