

# Bipolar Disorder and Suicide

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- **About 1,000,000 people die because of suicide each year.**
- **Suicide** is possibly the most important recurrent risk presented by **mood** disorders.

# Terminology

- Fear of dying
- Thoughts of death
- Suicide ideation/contemplated suicide
- Suicide rehearsal
- Suicide intent
- Suicide plan
- Pseudosuicide/Parasuicide
- Aborted suicide attempt
- Interrupted suicide attempt
- Suicide attempt/act
- Committed/completed/fatal suicide
- Extended suicide

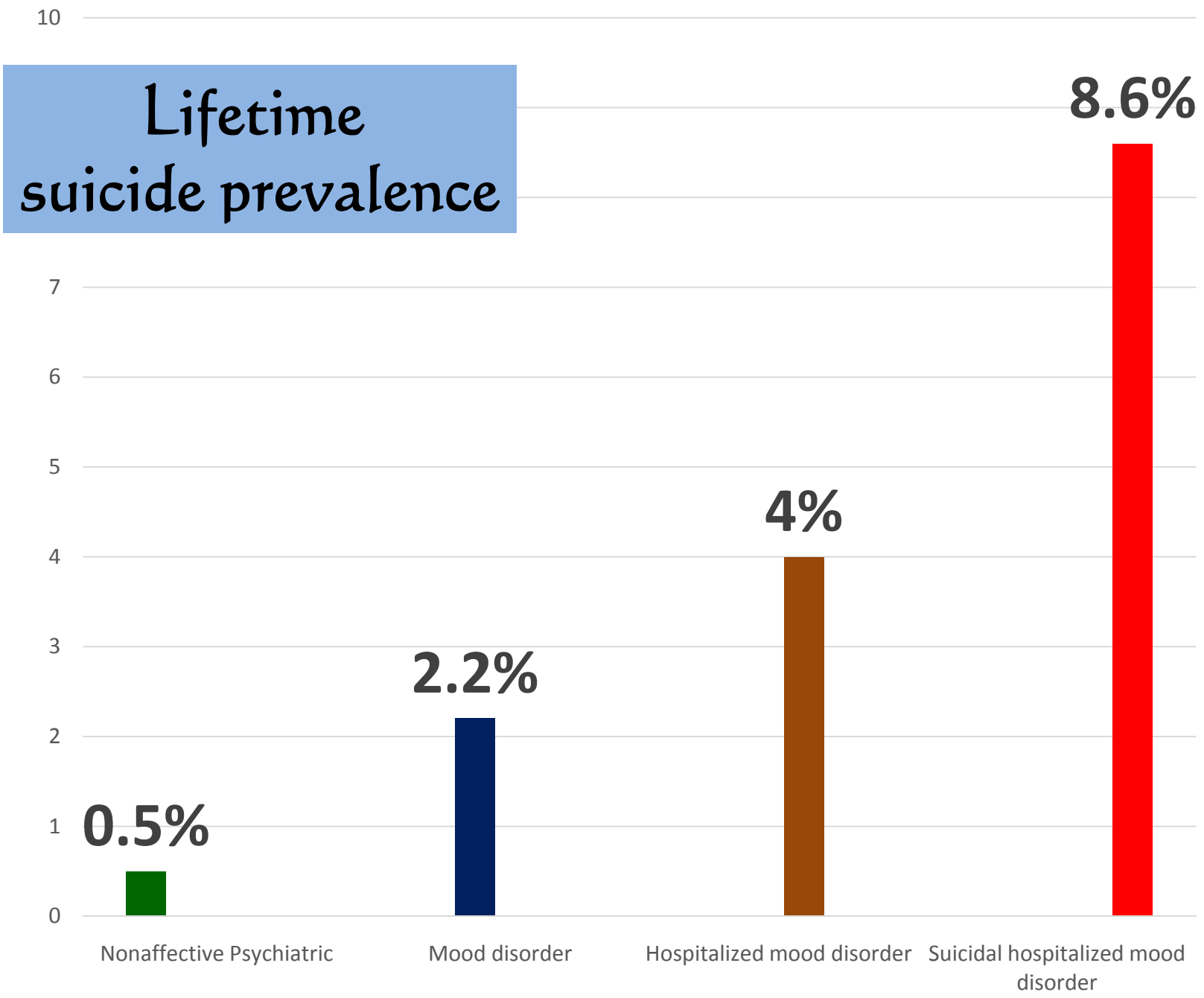
# Bipolar Disorder

- **Suicide in BD may account for  $\frac{1}{4}$  of all committed suicides.**

*(Rihmer Z, Kiss K. Bipolar disorders and suicidal behaviour. Bipolar Disord 2002; 4 (Suppl. 1): 21–25.)*

- **Suicide, cardiovascular diseases, and cancer are the three most prevalent causes of death among BD cases.**

*(Pompili M, Gonda X, Serafini G, Innamorati M, Sher L, Amore M, Rihmer Z, Girardi P. Epidemiology of suicide in bipolar disorders: a systematic review of the literature. Bipolar Disord 2013; 15: 457–490.)*



**Lifetime suicide prevalence**

# Index of lethality

- **Index of lethality=Ratio of attempts/suicides**
- **BD patients, especially BD-II cases, use **more lethal** suicidal methods compared to patients with unipolar depression.**
- **The index of lethality was **5.1** in **BD-II** and **10.8** in **BD-I** patients.**

# Bipolar Disorder

- Without treatment, about **10/1000** BD patients commit suicide and **40/1000** attempt suicide every year.

(Gibbons RD, Hur K, Brown CH, Mann JJ. Relationship between antiepileptic drugs and suicide attempts in patients with bipolar disorder. Arch Gen Psychiatry 2009; 66: 1354–1356.)

- **25 to 50%** attempt suicide at least once during the lifetime, and **6% to 19%** complete suicide.
- BD patients in general, and **BD-II** subjects in particular, carry the highest risk of both **attempted** and **completed** suicide.

(Beyer JL, Weisler RH. Suicide Behaviors in Bipolar Disorder: A Review and Update for the Clinician. Psychiatr Clin North Am. 2016;39(1):111-23)

## Risk factors in Bipolar Disorder (SUICIDE)

- The risk of suicide among those with BD was greatest in men and early during the course of BD-I.

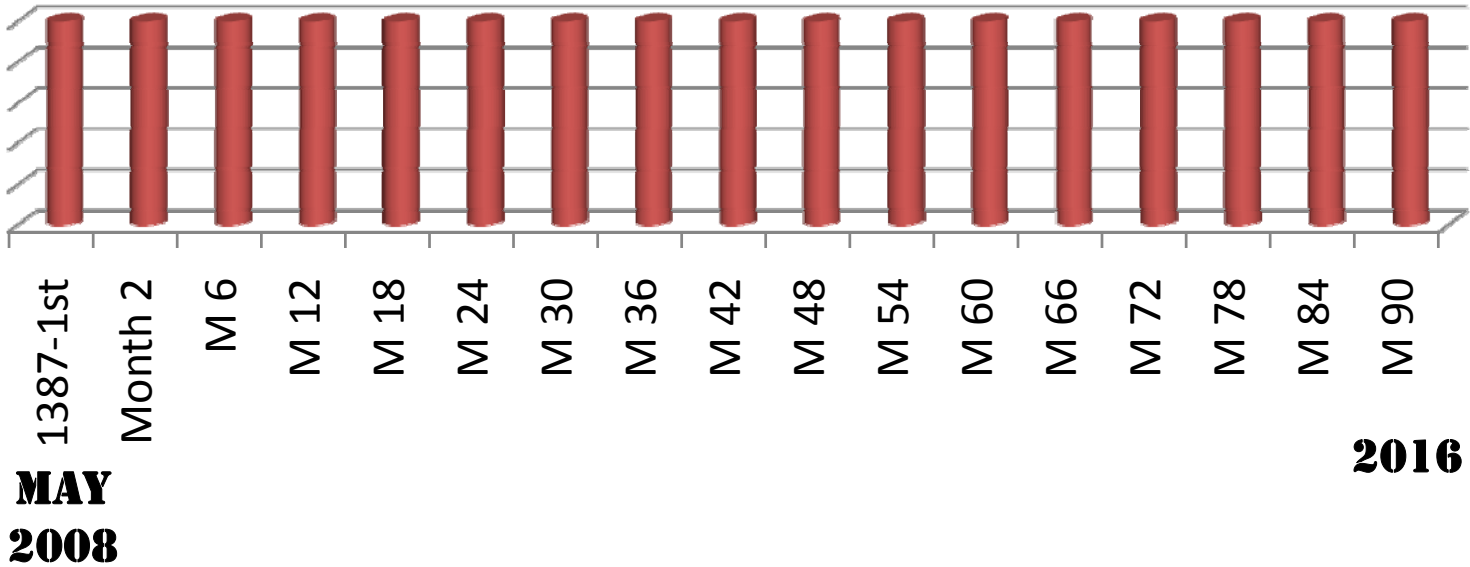
*(Pompili M, Gonda X, et al. 2013: 15: 457–490.)*



# Risk factors in Bipolar Disorder (SUICIDE)

- **Family history of suicide**
- **Previous suicide attempts**
- **Younger age of onset**
- **Comorbid psychiatric illnesses**
- **Psychological symptoms like hopelessness**

# Bipolar Disorder Patients Follow-up (BDPF)



(Shabani, et al.)

# Bipolar Disorder Patients Follow-up (BDPF)

- **SCID-I**: Structured Clinical Interview for DSMIV axis I disorders
- **HDRS-7**: Hamilton Depressive Rating Scale-7
- **Y-MRS**: Young-Mania Rating Scale
- **SAPS**: Scale for the Assessment of Positive Symptoms
- **CGI**: Clinical Global Impression
- **GAF Scale**: Global Assessment of Functioning scale
- **WHOQOL-BREF**: World Health Organization Quality of Life-BREF
- **DAI-10**: Drug Attitude Inventory-10
- **FIGS**: Family Interview for Genetic Studies

*(Shabani, et al.)*

# Suicide attempt risk factors: 21-month follow-up

- 2008-2011; N=100
- Only **one** patient attempted suicide
- **33%** had history of previous suicide attempts.
- **Female** gender, **divorce**, and **early** age at onset of the disorder were independently correlated with suicide attempt.

*(Shabani A., Teimurinejad, S., et al., 2013)*

# Suicide attempt risk factors

- **BD-I = BD-II**
- **Women** > men
- Risks were greater with **longer exposure**, whereas incidence rates decreased with longer time at risk, possibly through 'dilution' by longer exposure.  
*(Tondo and Pompili, 2016; Review)*
- Suicide attempts are **less** likely in patients with a preponderant **manic** or **psychotic** course of the illness.

*(Finseth, et al.2012)*

## Risk factors concerning pharmacotherapy

- **Antidepressant** medications, particularly after sudden discontinuation of a **mood stabilizer** or in a period while the individual has stopped taking **lithium**

# Antidepressants

- **Antidepressants** may protect patients with BD but not unipolar depressive disorder from **suicidal** behavior.

*(Leon, et al, 2014)*

# Lithium and suicide

- **↓80% in suicides and attempted suicides among patients with BD and other major mood disorders treated with lithium for an average of 18 months: It was not observed in STEP-BD.**

*(Large meta-analysis by Baldessarini RJ, et al. Bipolar Disord 2006; 8: 625–639.) (Marangell LB, et al. J Clin Psychiatry 2008; 69: 916–922.)*

- **Li has been associated with a decreased rate of suicide in randomized studies and in observational studies: compared with VLP or to anticonvulsants in general.**

*Cipriani A, Pretty H, Hawton K, Geddes JR. Am J Psychiatry 2005; 162: 1805–19; Goodwin FK, Fireman B, Simon GE, Hunkeler EM, Lee J, Revicki D. JAMA 2003; 290: 1467–73; Kessing LV, Sondergard L, Kvist K, Andersen PK. Arch Gen Psychiatry 2005; 62: 860–6; Sondergard L, Lopez AG, Andersen PK, Kessing LV. Bipolar Disord 2008; 10: 87–94.*



# Lithium and suicide

- Decreasing the rate of suicidal acts, and reducing the **'lethality of suicide'**.

	Bipolar	General population	Lithium
Ratio of attempted to completed suicide	5:1	20–30:1	↑ by about 3 times

*(Baldessarini et al, 2006)*

# Suicide

- In 2009, the **FDA** issued an advisory that the use of **AEDs** for **any indication** can increase the risk of **suicidal behavior or ideation**, based on a meta-analysis of 199 RCTs yielding an **odds ratio of 1.87** for patients on AEDs compared with patients on placebo. [the number needed to harm=**769**]

(Postmarket Drug Safety Information for Patients and Providers. Suicidal behavior and ideation and antiepileptic drugs, 2013)

- A **30-year** prospective observational study found **no evidence** for increased **suicide attempts or completions** for **bipolar** patients while they were taking **AEDs** compared with these same patients during intervals when they were not.

(Leon AC, Solomon DA, et al. Antiepileptic drugs for bipolar disorder and the risk of suicidal behavior: a 30-year observational study, 2012)

# Impact of psychotropics on suicidal risk (BD)

- The available evidence is **largely methodologically flawed** and, except for a few instances, clinically not useful at this point.
- **Antidepressants may** increase suicidal risk in BD, this possibly being related to the induction of broadly defined **mixed** states.
- There is no evidence that **antiepileptic** drugs as a class increase suicidal risk in patients with bipolar disorder.
- **Only lithium** provides convincing data that it reduces the risk of suicide over the long term.
- There is little known regarding the effects of **antipsychotics**, as well as **anti-anxiety** and **hypnotic** drugs, on suicidal behavior.

*(Yerevanian and Choi, 2013)*

## Clinical point

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- Clinicians need to be particularly **sensitive** to their patient's thoughts and beliefs about death, particularly during:

- **Stressful times** of life

- a **depressive** episode of BD, especially with **mixed** features

- anxiety/**agitation**

- first few days of the **treatment**

- the **first six** months after **discharge**, particularly in the **first three** months

- a **rapid cycling** course

(Pompili M, Gonda X, et al. 2013: 15: 457–490.)

(Beyer JL, Weisler RH. Psychiatr Clin North Am. 2016;39(1):111-23)

(Gibbons RD, et al. Arch Gen Psychiatry 2009; 66: 1354–1356.)