# Suicide & Epilepsy

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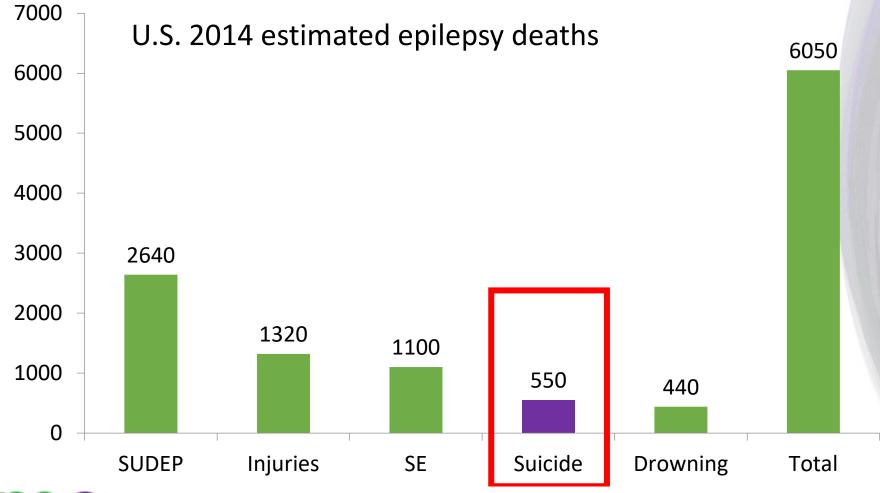
#### **Anxiety & Depression**

- Very common in epilepsy
  - One third of patients
- Greater impact on quality of life than seizures
- Under-recognized and undertreated
- Associated with increased risk of suicide



Scott et al. Epilepsia 2017, Kwan et al. Epilepsia 2009, Scott et al. Epilepsy & Behavior 2021, Fazel et al. Lancet Neurology 2013, Stefanello et al. Arq Neuropsychiatr 2011.

#### Suicide: a Common Cause of Death in Epilepsy





Devinsky et al. Neurology 2015

#### Suicidal ideation and attempts

- Suicidal ideation is VERY common
  - Nearly 25% over the lifetime
- Suicide attempts
  - 7.4% of people with epilepsy



#### Who is at risk for suicidality?

- Younger age, especially teens
- Sex/gender
  - women/girls more likely to have suicidal ideation
  - men/boys more likely to complete suicide
- Lower social support
- Anxiety or depression, other psychiatric conditions
- Family history of suicide
- Recent epilepsy diagnosis
- More severe epilepsy-seizures, surgery



Falcone et al. Epilepsia 2020, Abraham et al. Int J Environ Res Public Health 2019, Nigussie et al. BMJ Open 2021, Fazel et al. Lancet Neurology 2013, Kim et al. Seizure 2020, Mbizvo et al. Epilepsy Res 2019

## Why is there increased suicide risk in epilepsy?

#### Bidirectional relation

Increased risk before epilepsy onset, and after

- Independent of existing psychiatric disorder
- Common underlying biology
- Mechanism unknown
  - Neurotransmitters and receptors
  - Endocrine function, especially stress system
  - Inflammatory or structural changes





#### What about antiseizure medications?

- 2008 FDA back box warning for entire medication class
  - Based on limited meta-analysis of clinical trials
- May be due to confounding by psychiatric symptoms
- No evidence of increased risk with newer medications
- Risk may be present with medications causing psychiatric side effects



Pugh et al. Neurology 2013, Klein et al. JAMA Neurol 2021, Pugh et al. J Am Geriatr Soc 2012

## What can be done to prevent suicide?

- Detect and treat anxiety and depression
- Detect suicidality and take action

Neurologists can help!

#### **Screening**

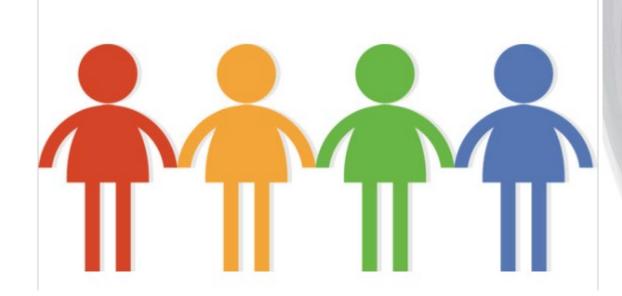
NDDI-E question 4 sometimes, always or often PHQ-9 question 9 anything but "not at all"



### What can be done to prevent suicide?

- Safety measures in the home
  - Restricting access to lethal means such as firearms

Social support





### What can be done to prevent suicide?

Emergency hotlines and resources

https://www.sprc.org/resources-programs/suicide-prevention-

resources-parentsguardiansfamilies

#### National Suicide Prevention Lifeline

We can all help prevent suicide. The Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for you or your loved ones, and best practices for professionals in the United States.





#### Support for families

- Support groups, other resources
- https://suicidepreventionlifeline.org/help-yourself/loss-survivors/
- https://afsp.org/find-a-support-group/
- https://www.sprc.org/livedexperience/tool/resources-survivorssuicide-loss
- https://save.org/what-we-do/grief-support/
- https://allianceofhope.org/



# Thank you!

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