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# Epilepsy during the COVID-19 pandemic lockdown: a US population survey

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# EPILEPSY DURING THE COVID-19 PANDEMIC LOCKDOWN: US POPULATION SURVEY

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## OBJECTIVE AND METHODS

- **Objective:** To understand issues facing people with epilepsy (PWE) during the lockdown period of the COVID-19 pandemic in the United States
- **Methods:** Observational, Cross-sectional Survey Study sent to participants who self-identified as PWE and their caregivers, directed to users of SeizureTracker.com
  - Topics included: seizure frequency, medication, lifestyle factors, mental health, etc.
  - Calculated an estimated COVID mortality risk odds ratio (OR) based on responses, used for subgroup analyses

## RESULTS

- 22,221 survey invitations sent, 505 respondents
- 25% reported increased seizure frequency during lockdown
  - Disrupted sleep (63%) and decreased exercise (42%) were most prevalent cited reasons
- Most common sources of anxiety: fear of hospitalization (53%), concern for loved ones (52%)
- 5% of respondents stopped or reduced anti-seizure drugs
  - Attributed to problems with communication, access, and cost
- Median COVID-19 mortality risk was generally low (OR 1.67)

## DISCUSSION

- PWE may benefit from increased outreach to ensure medication supply is maintained, and to educate about pandemic-related lifestyle changes that can affect seizure burden (e.g. decreased sleep, exercise)
- Major impact on mental health (47% reported increased anxiety, 28% more depressed) in a population with higher mental health rates to begin with
- Generally low COVID mortality OR is largely reflective of young age of participants, but their challenges may not be accounted for with typical COVID risk factors (Age, medical comorbidities, etc.)

## CONCLUSIONS

- PWE and their caregivers face significant challenges during the pandemic, particularly regarding seizure burden, lifestyle, access to care and mental health
- Given that a significant portion of PWE do not have typical COVID-19 risk factors (i.e. young age with minimal comorbidities), they may be at risk of being overlooked in a saturated health care system