## Impact of COVID 19 on Demographics in patients receiving Electroconvulsive therapy Siva Sundeep Koppolu MBBS, Srinath Gopinath MD, Brent Carr MD



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#### Introduction

- □ Electroconvulsive therapy (ECT) is one of the oldest available treatments that is still been used for the treatment of refractory mood disorders.
- □ It is also used for emergencies such as termination of intractable seizures, or for those acute suicidal patients, and mood disorders during pregnancy.
- However, COVID 19 infection mitigation led to severe disruption of the service wherein UF Neuromodulation program had to markedly decrease the delivery of ECT for around about 50 days.
- Once restrictions were lessened, ECT services resumed at a less restrictive level. For some, this disruption of their ECT course led to worsening of their conditions, including hospitalization.

#### **Objective**

□ Identify the impact of COVID-19 on out-patients, categorized by their demographics for interpretation and accessibility towards their care in getting ECT.

#### **Methods**

- We retrospectively chart reviewed the patient demographics before and after the recent COVID-19 pandemic i.e., when UF Health Shands Psychiatric Hospital (UFH SPH), Gainesville, Florida had to stop providing the ECT to their patients for a period of approximately 50 days (about 7 weeks.)
- We reviewed the out-patient groups delineated by the patient demographics 8 weeks before and after, such as patients' age, gender, and ethnicity.
- Inclusion criteria: Out-patient setting
  - Patients who had been getting series, maintenance and continuous ECT treatment for various diagnosis at UFH SPH within 8 weeks before the pandemic.
  - □ Ages: 17-89 years
- Exclusion criteria: In-patient setting
  - Patients who hasn't got any ECT treatments within 8 weeks before the COVID-19 pandemic hiatus.
  - Patients who had stopped getting any ECT's before and after the COVID-19 pandemic hiatus within 12 weeks.

Results

Graph 1 Graphical representation of the total number of ECTs delivered at the UFH SPH before and after the COVID 19 pandemic hiatus





Chart 2 Decrease in the return to ECT after the COVID hiatus in delivery of treatment



Chart 3



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Column2 — Column3

Total # of ECTs received (by 55 pt.) before the pause are 225.

Total # of ECTs received (by 55 pt.) after the pause are 84.

# pt. who had atleast one ECTs before the

# pt. who didn't attent atleast for one ECT

# pt. who did attented atleast for one ECT

□ The post COVID hiatus restart of treatment hasn't had a significant increase in the inflow.

**Results** 

- □ In fact, it showed some significant slump in both the # of pts returning for the ECT (43 % return rate for ECT) (Graph 1 and Chart 1) and the # of pts getting the ECTs.
- □ There is approximately 26% decrease in the total number of ECTs delivered for 8 weeks post COVID hiatus.
- However there is significant reduction in the total ECTs for patients getting acute series or maintenance or continuous ECT which is around about 37%.
- Sex ratio of the patient getting ECTs is been dominated by females of around 64%

#### Summary

- □ It has been noted that there may be gradual surge in return of patients who had been getting ECTs as their treatment beyond 8 weeks which is beyond this poster's power.
- □ The idea gained during this work is whether it is COVID infection improvement in the community or the return of normality in the delivery of treatment, it would happen gradually, but acuteness has no role in the post COVID recovery changes.
- However, there has been significant reduction in all aspects of getting the ECT's immediately following the restart after the COVID-19 hiatus period.

#### **Conclusion/Limitations**

- □ The biggest limitation is the follow up period (8 weeks) is short, we would expand the data base over time extending it to period (at least for 1 year) before and after COVID when once the timeline of the pandemic has been delineated.
- One other factor, which was made aware while reviewing this and while talking to the patients is, transportation is the biggest factor that has played a significant role in preventing the patient to return.
- □ For the patients, who return, there is almost 50% increase in their frequency of getting their ECTs.