

## IMPACT OF COVID-19 ON ECT PRACTICE IN QATAR

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received: 2.4.2021;

revised: 8.7.2021;

accepted: 4.8.2021

### SUMMARY

*There is paucity of Electroconvulsive therapy (ECT) utilization surveys from the Arabian Gulf region and none available from Qatar. There is no literature available on impact of Coronavirus Disease 2019 (COVID-19) pandemic on ECT provision. ECT is a lifesaving treatment in psychiatric practice requiring anesthetic support and there were concerns that redeployment of anesthesiologists due to COVID-19 pandemic might have comparatively bigger impact on the provision of ECT. These concerns stem from the fact that psychiatric patients often get discriminated against in health care systems; largely due to stigma and the belief among healthcare providers that psychiatric illness is somehow not as serious as other types of medical or surgical illness. In this brief report we present pre-COVID ECT utilization from Qatar. We also report findings on ECT utilization during COVID-19 and compare changes with other elective and non-elective surgeries. ECT provision was down by 40% during March to August 2020 in our setting. The decline in ECT provision was comparable to other elective and non-elective surgeries.*

**Key words:** electroconvulsive therapy - coronavirus disease 2019 - mental health

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### INTRODUCTION

Coronavirus Disease 2019 (COVID-19) was declared as a public health emergency by the World Health Organization in March 2020. The State of Qatar confirmed its first positive case on 29<sup>th</sup> February 2020. By July, Qatar had one of the highest numbers of COVID-19-positive patients per million population (COVID19 Home, n.d.). The COVID-19 pandemic has posed unprecedented challenges for healthcare delivery due to lockdown measures which were implemented to limit the spread of infection. The Ministry of Public Health in Qatar advised minimizing direct contact with patients for non-urgent care. These restrictions had a huge impact on the provision of psychiatric services. All routine outpatient clinics, daycare services and community outreach services were suspended as part of the containment strategy (Wadoo et al. 2020). Qatar's only psychiatric inpatient hospital that receives acute admissions from all over the country was designated as a non-COVID-19 site. Similar measures were put in place by other non-psychiatric general and specialist hospitals in the State of Qatar. Hospitals suspended non-urgent care and elective procedures in an effort to minimize exposure by staff and patients. More importantly, anesthesiologists were redeployed to COVID-19 related intensive care facilities due to high demand at the time. Concerns were raised at the outset of the pandemic that ECT might not be prioritized by policy makers and resource allocation decisions might have adverse consequences for patients with psychiatric disorders in need of this lifesaving treatment (Espinoza et al. 2020). In this paper we present the findings of impact of COVID-19 on ECT provision in Qatar.

### IMPACT OF COVID-19 ON ECT UTILIZATION

The State of Qatar is a peninsula situated halfway down the western coast of the Arabian Gulf, bordered to the south by the Kingdom of Saudi Arabia. It is one of the world's wealthiest nations in terms of per capita GDP and has a population of 2.7 million (Wadoo et al. 2020). Qatar has a predominantly state-funded mental healthcare (Saeed et al. 2020). ECT is only offered in the state funded hospital. The state recognized the need to adapt quickly so that patients continue to receive a range of psychiatric services including ECT. The provision of ECT was prioritized as a lifesaving treatment with appropriate resource allocation. The mental health services adapted the general recommendations for infection control in addition to modifying anesthesia protocols in collaboration with infection control and anesthesia department for safe provision of ECT.

The six months which have elapsed since the beginning of the pandemic appear to be a reasonable observation period for a first look into the actual data on ECT utilization during this period. We analyzed the aggregate data on the number of people who received ECT during 6 months of 2020 and compared with data from 2019. Permission was granted to publish this anonymized aggregate data from hospital directors of the corresponding mental health services. No patient records were accessed, and hence IRB approval was not required.

ECT utilization during 2015-2019 is shown in Table 1. ECT was administered to 35 patients annually. In the 10 months of 2020 we provided ECT to 18 patients.

**Table 1.** ECT utilization in the State of Qatar

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2015	4	2	3	6	6	2	0	3	5	3	1	1	36
2016	5	8	8	4	2	3	3	4	5	6	5	1	54
2017	3	4	4	5	7	4	0	1	1	3	0	0	32
2018	1	1	1	4	3	1	2	2	1	1	1	2	20
2019	6	4	4	1	2	5	7	1	2	1	3	0	36
2020	1	3	4	1	1	1	3	2	1	0	-	-	18

In the first 6 months of the pandemic (March - August 2020), when there was widespread lockdown and peak numbers of infection, ECT was administered to 12 patients only compared to 20 patients during March to August 2019.

## DISCUSSION

ECT provision during COVID-19 was down by 40% in our setting. The reasons for low utilization during this period was due to lesser referrals from outpatients for patients with treatment resistant depression. ECT was offered to inpatients where a rapid definitive response for the emergency treatment of depression was needed which included patients with high suicidal risk or severe psychomotor retardation and associated problems of compromised eating and drinking and/or physical deterioration. The decline in ECT provision during COVID-19 pandemic was comparable to other elective and non-elective surgeries. It is important to note that there was a decline in overall admissions (9-75%) in non-psychiatry specialty care hospitals in the State of Qatar during the COVID-19 era (March 2020), when compared to January 2020 and March 2019. A decline in both elective and non-elective surgeries was observed. A decline of 9-58% was observed in admissions for acute appendicitis, acute coronary syndrome, stroke, bone fractures, cancer and live births, while an increase in admissions due to respiratory tract infections was observed (Butt et al. 2020) Sharp declines in Emergency Department (ED) visits has been reported in both general and specialty hospitals (Butt et al. 2020) but there is no data on mental health presentations to ED or overall admissions to psychiatric facilities during this period; however a rise in local COVID-19 cases was associated with an increase in demand and access to national mental health helpline and access to tele-psychiatric services in Qatar (Karim et al. 2020).

There is paucity of ECT utilization surveys from the Arabian Gulf region and none available from Qatar. Our 2015-2019 pre-COVID data on ECT shows low utilization rates in Qatar. The reasons for low utilization are multifactorial. In our setting, the low utilization in the recent years has been attributed to introduction of clinical practice guidelines limiting the indications and severity of illness where ECT can be used. Low utilization in the Arabian Gulf region has also been attributed to stigma associated with mental illness in general and ECT in particular (Zolezzi et al. 2018,

Elzamzamy & Wadoo 2020). The portrayal of ECT in the media has perpetuated its negative image and increased the stigma (Okasha 2007, Elzamzamy et al. 2020). Many countries in the region have called for change in the name of ECT, as they believe it is not only misleading but perpetuates the stigma (Okasha & Okasha 2014). Persistent and pervasive stigma dissuades patients and their families from considering ECT as a treatment option. Other important factors that contribute to underutilization are psychiatrists' lack of training and exposure with the procedure, and under-emphasis of ECT training in residency programs (Dinwiddie & Spitz 2010). Research has shown that attitudes toward ECT become markedly more favorable with actual exposure and experience (Szuba et al. 1992).

Our preliminary findings are reassuring as the decline in ECT utilization was comparable to other elective and non-elective surgeries. The possible reasons include, well-resourced state-funded mental healthcare; appropriate resource allocation during COVID-19 and pre-COVID low ECT utilization rates. COVID-19 has turned a spotlight on mental health. We hope the pandemic can give a new impetus to achieving parity between physical and mental health.

**Acknowledgements:** None.

**Conflict of interest:** None to declare.

### Contribution of individual authors:

Ovais Wadoo, Javed Latoo & Majid Alabdulla conceived this manuscript.

Shereen Mohammed Aly collected the aggregate data.

Ovais Wadoo wrote the initial draft.

All authors contributed to analysis, critical input and discussion section of this manuscript.

All authors read and approved the final version of the manuscript.

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