



Impact of COVID-19 on Pediatric Epilepsy Care in Indonesia

Setyo Handryastuti¹ · Amanda Soebadi¹ · Irawan Mangunatmadja¹ · Asep Aulia Rachman¹ · Achmad Rafli¹

Received: 28 November 2022 / Accepted: 16 March 2023

© The Author(s), under exclusive licence to Dr. K C Chaudhuri Foundation 2023

To the Editor: During the pandemic Covid-19, medical services were modified to reduce physical contact by using teleconsultation for treatment to protect the vulnerable population, such as children with epilepsy [1–3]. From our study, we found that the majority of services for epileptic children experienced a 25–75% decline in the number of face-to-face patients, which is same as worldwide [1, 2]. Our research was conducted by an online survey filled by 71 pediatric neurologists across 15 provinces that implemented restriction level 4 from July 2021 until several months later. The study consisted of 20 questions from Wirrell and Albert's study, including demographic data and the impact on health services for children with epilepsy (established and new cases) [1].

Our study showed there was no difficulty in accessing electroencephalography (EEG) examinations. This finding is different from other research that showed that majority of children experienced barriers to health services, including EEG examinations. Our study showed that there were continued EEG examinations during the pandemic because most respondents came from type A and B referral hospitals, which consider protection of health workers with two vaccinations having a high coverage rate of 96.2% and adequate PPE [2].

Our study shows that there was no change in service for children with new epilepsy; either for single or recurrent afebrile/unprovoked seizures. It shows that a face-to-face consultation and simultaneous EEG examination is still the choice of most respondents. This is due to the concerns about a wrong diagnosis in new cases from the doctors and patients.

An international survey showed a change in healthcare especially face-to-face consultation/teleconsultation with

39.2% recommending a teleconsultation [2]. In established patients, both controlled and uncontrolled, teleconsultation has become an option and dominates, although still mixed with face-to-face dominance. However, many respondents have not selected teleconsultation only [2, 4]. Considering that, our study suggests that teleconsultation is accepted and used more rapidly in Indonesia (with its diverse geographical conditions and the limited number of pediatric neurology consultants).

Acknowledgments The authors are grateful to all the members of Neurology Working Groups Indonesian Pediatric Society that participated in this study.

Declarations

Ethical Approval This study passed the ethical review of the Health Research Ethics Committee, Faculty of Medicine, University of Indonesia – Dr. Cipto Mangunkusumo Hospital with Number: KET-1225/UN.2F1/ETIK/PPM.00.02/2021.

Conflict of Interest None.

References

1. Wirrell EC, Grinspan ZM, Knupp KG, et al. Care delivery for children with epilepsy: During the COVID-19 pandemic: An international survey of clinician. *J Child Neurol.* 2020;35:924–33.
2. Albert DVF, Das RR, Acharya JN, et al. The impact of Covid-19 on epilepsy care: A survey of the American Epilepsy Society membership. *Epilepsy Curr.* 2020;20:316–24.
3. Pudjiadi AH, Putri ND, Sjakti HA, et al. Pediatric covid-19: Report from Indonesian Pediatric Society Data Registry. *Front Pediatr.* 2021;9:716898.
4. Sethi NK. EEG during the COVID-19 pandemic: What remains the same and what is different. *Clin Neurophysiol.* 2020;131:1462.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

✉ Setyo Handryastuti
setyo.handryastuti.research@gmail.com

¹ Neurology Division, Department of Child Health, Dr. Cipto Mangunkusumo National Hospital-Faculty of the Medicine, University of Indonesia, RSCM Kiara 11th Floor, 71 Diponegoro Street, Jakarta 10430, Indonesia