

SHORT COMMUNICATION

ACUTE ENCEPHALITIS SYNDROME, DIFFICULTIES IN ENFORCING A DIAGNOSIS AND PROMOTING VACCINATION IN INDONESIA**Prastiya Indra Gunawan¹, Riza Noviandi², Sunny Mariana Samosir³**¹Department of Child Health, Universitas Airlangga, Faculty of Medicine²PhD Pediatric Neurology Lecturer, Department of Pediatrics, Faculty of Medicine, Universitas Airlangga, Dr Soetomo General Academic Hospital, Surabaya, Indonesia³MD Pediatric Neurology Lecturer, Department of Pediatrics, Faculty of Medicine, Universitas Airlangga, Dr Soetomo General Academic Hospital, Surabaya, Indonesia**Corresponding Author:** Prastiya Indra Gunawan, Department of Child Health, Universitas Airlangga, Faculty of Medicine**Email:** prastiya-i-g@fk.unair.ac.id

Brain infection in children is still a major problem in Indonesia. The term acute encephalitis syndrome refers to a state of body heat with altered mental status and/or seizures. AES is caused by bacteria, viruses, fungi or other parasites. Data on AES incidents in Indonesia is still unclear. At Dr Soetomo Hospital, Surabaya, Indonesia, which is one of the education centers in Indonesia, 30 cases were found in 2015.¹ One of the viral etiology that causes AES is Japanese Encephalitis (JE). In 2014 the Ministry of Health in collaboration with WHO developed JE sentinel surveillance in Bali and four other at-risk provinces. In 2016, JE sentinel surveillance was expanded to 11 provinces. Surveillance data for JE cases in Indonesia in 2016 showed that there were nine provinces that reported JE cases, including the Provinces of Bali, West Kalimantan, North Sulawesi, East Nusa Tenggara, DKI Jakarta, DI Yogyakarta, Central Java, West Nusa Tenggara, and Riau Islands. . The results of sentinel surveillance 2016 in 11 provinces showed that there were 326 cases of AES with 43 cases (13%) of which were positive for JE. As many as 85% of JE cases in Indonesia are in the 15 year age group and 15% in the > 15 year age group. Most JE cases are in the province of Bali.

The increase in transmission of this disease is thought to be due to several risk factors, including: 1) An increase in the mosquito population during the rainy season; 2) Absence of JE specific antibodies either naturally acquired or through immunization; 3) Living in an JE endemic area; and 4) Behaviors that increase the likelihood of being bitten by mosquitoes, such as sleeping without using a mosquito net. The most important interventions in the prevention and control of JE are vector control both chemically and non-chemically, maintaining a clean residential and farm environment free from breeding

habitats for JE-transmitting mosquitoes, strengthening surveillance, and JE immunization in humans in addition to vaccinating animals (pigs, horses). and poultry). Immunization is the most effective way to prevent JE in humans.

Several interventions to increase immunization coverage in relation to AES cases have been carried out. Among them by providing additional knowledge to medical personnel at the Pasongsongan Health Center, Sumenep, East Java about how to diagnose AES and perform management. Medical personnel, including doctors, nurses, nursing assistants, midwives and other health cadres, were quite enthusiastic about participating in the event until it was finished, which could be seen from their participation from the beginning of the event to the end. Some of the problems that arise include how the level of difficulty is high for establishing the diagnosis of AES and adequate management. Until now, enforcement of the etiology of AES is still an obstacle in Indonesia. Limited laboratory equipment causes the diagnosis of JE can only be made at a referral hospital that has JE serological testing equipment. But they support that immunization is a priority preventive intervention to reduce the morbidity (mostly cerebral palsy) and mortality of AES cases in their area.² They also believe that the effort to improve AES complication is difficult and costly.³

References

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