



DAFTAR PUSTAKA

- Ahmad, M., Ab Rahman, A.F., Universiti Sultan Zainal Abidin School of Pharmacy, Terengganu, Malaysia, Sapuan, S., dan Department of Medical, Hospital Sungai Buloh, Jalan Hospital, Selangor, Malaysia, 2020. Factors Associated with Good Seizure Control in Patients on Valproic Acid. *The Eurasian Journal of Medicine*, 52: 41–46.
- Albert, D.V.F., Moreland, J.J., Salvator, A., Moore-Clingenpeel, M., Haridas, B., Cole, J.W., dkk., 2019. Seizure Action Plans for Pediatric Patients With Epilepsy: A Randomized Controlled Trial. *Journal of Child Neurology*, 34: 666–673.
- Asadi-Pooya, A.A., Mintzer, S., dan R. Sperling, M., 2008. Nutritional supplements, foods, and epilepsy: Is there a relationship? *Epilepsia*, 49: 1819–1827.
- Asadi-Pooya, A.A., Mirzaei Damabi, N., Rostaminejad, M., Shahisavandi, M., dan Asadi-Pooya, A., 2021. Smart devices/mobile phone in patients with epilepsy? A systematic review. *Acta Neurologica Scandinavica*, 144: 355–365.
- Ayudhya, D.P.N., Suwanmanee, J., dan Visudtibhan, A., 2006. Pharmacokinetic Parameters of Total and Unbound Valproic Acid and Their Relationships to Seizure Control in Epileptic Children. *American Journal of Therapeutics*, 13: 211–217.



Bauer, L.A., 2008. *Applied Clinical Pharmacokinetics*, 2nd ed. ed. McGraw-Hill

Medical, New York.

BNF, 2020. *BNF for Children 2020-2021*. BMJ Group, London.

Bourin, M., Chenu, F., dan Hascoet, M., 2009. The Role of Sodium Channels in the Mechanism of Action of Antidepressants and Mood Stabilizers. *Current Drug Targets*, 10: 1052–1060.

Budi, T., Toth, K., Nagy, A., Szever, Z., dan Kiss, A., 2015. Clinical significance of CYP2C9-status guided valproic acid therapy in children. *Epilepsia*, 56: 849–855.

Czornyj, L., Cáceres Guido, P., Bramuglia, G., Rodiño, A., Feria-Romero, I., dan Lazarowski, A., 2018. High incidence of persistent subtherapeutic levels of the most common AEDs in children with epilepsy receiving polytherapy. *Epilepsy Research*, 148: 107–114.

Endriastuti, N.E., Suryoputri, M.W., dan Ilma, D.L., 2022. The Evaluation Of Anti-Epileptic Drugs Dosage In Malnourished Children: Cases In Indonesian Community Of Epilepsy. *Jurnal Farmasi Sains dan Praktis*, 8: 142–150.

Eroğlu, E., Harmancı, N., Yıldırım, E., dan Sirmagül, B., 2020. Türkiye'de Antiepileptik İlaçların Terapötik İlaç Düzeyi İzlemi: Beş Yıllık Deneyim. *Osmangazi Journal of Medicine*, 43: 36–41.



Furdiyanti, N.H., Pramantara, I.D.P., dan Wahyono, D., 2014. Evaluasi Dosis Warfarin Dan Hasil Terapinya Pada Pasien Rawat Jalan 4: 175–179.

Gidal, B.E., 2017. Valproate, dalam: *Clinical Pharmacokinetics*. ASHP Publications, USA.

Gultekingil, A., Teksam, O., Haliloglu, G., dan Yalnizoglu, D., 2019. Risk factors for seizure recurrence in a pediatric observation unit. *The American Journal of Emergency Medicine*, 37: 2151–2154.

Hakim, L., 2015. *Farmakokinetik Klinik*, 4th. Bursa Ilmu, Yogyakarta.

Haryati, N., 2019. 'Rasionalitas Pendosisan Pada Terapi Pasien Geriatri Rawat Inap Dengan Penurunan Fungsi Ginjal Di Rsup Dr. Kariadi Semarang', , *Tesis*, . Universitas Gadjah Mada, Yogyakarta.

Hirsch, E., French, J., Scheffer, I.E., Bogacz, A., Alsaadi, T., Sperling, M.R., dkk., 2022. ILAE definition of the Idiopathic Generalized Epilepsy Syndromes: Position statement by the ILAE Task Force on Nosology and Definitions. *Epilepsia*, 63: 1475–1499.

Ibrahim, H. dan Rahman AB, F.A., 2008. Pharmacokinetic Parameters of Valproic Acid and Carbamazepine from Routinely Collected Data: Influence of Patient Characteristics. *Malaysian Journal of Pharmaceutical Sciences*, 6: 33–42.

Kaur, A., 2015. Demography of Race and Ethnicity in Southeast Asia, dalam: Sáenz, R., Embrick, D.G., dan Rodríguez, N.P. (Editor), *The International*

Handbook of the Demography of Race and Ethnicity, International Handbooks of Population. Springer Netherlands, Dordrecht, hal. 171–187.

Kementerian Kesehatan, 2016. 'Peraturan Mentri Kesehatan tentang Rencana Aksi Nasional Kesehatan Lanjut Usia Tahun 2016-2019', , dalam: *Permenkes No 25 Tahun 2016*. Kementerian Kesehatan RI, Indonesia.

Kementerian Kesehatan, 2017. 'Keputusan Mentri Kesehatan tentang Pedoman Nasional Pelayanan Kedokteran Tata Laksana Epilepsi Pada Anak', , dalam: *Kepmenkes Nomor HK.01.07/MENKES/367/2017*. Kementerian Kesehatan RI, Indonesia.

Kilinc, Y.B., Hancı, F., Ankaralı, H., Ankaralı, S., dan Kabakus, N., 2021. Risk factors affecting seizure recurrence in childhood epilepsy during short-term follow-up. *Child's Nervous System*, 37: 2857–2863.

Kustantinah, 2009. *Pedoman Pemantauan Terapi Obat*. Depkes RI, Jakarta.

Kusumastuti, K., Gunadharma, S., dan Kustiwati, E., 2019. *Pedoman Tata Laksana Epilepsi*, Edisi 6. ed. Airlangga University Press, Jakarta.

Lan, X., Mo, K., Nong, L., He, Y., dan Sun, Y., 2021. Factors Influencing Sodium Valproate Serum Concentrations in Patients with Epilepsy Based on Logistic Regression Analysis. *Medical Science Monitor*, 27: .

Laoh, E.Y.L., 2019. 'Hubungan Frekuensi Kekambuhan Kejang Terhadap Perubahan Fungsi Kognitif Pada Pasien Dewasa Dengan Epilepsi Di

Poliklinik Neurologi Rsud Budhi Asih', , *Skripsi*, . Universitas Binawan Jakarta, Jakarta.

Lau, S.W.J., Cheung, L.K., dan Chow, D.S.L., 2016. Application of Pharmacokinetics to Specific Populations: Geriatric, Obese, and Pediatric Patients, dalam: *Applied Biopharmaceutics and Pharmacokinetics*. McGraw-Hill Education, USA.

Lemeshow, S., 1990. *Adequacy of Sample Size in Health Studies*. Published on behalf of the World Health Organization by Wiley ; Distributed in the U.S.A., Canada, and Japan by Liss, Chichester [England] ; New York : New York, NY, USA.

Lin, W., Jiao, Z., Wang, C., Wang, H., Ma, C., Huang, P., dkk., 2015. Population Pharmacokinetics of Valproic Acid in Adult Chinese Epileptic Patients and its Application in an Individualized Dosage Regimen. *Therapeutic Drug Monitoring*, 37: 76–83.

Lingga, H.N., Hakim, L., dan Pramantara, I.D.P., 2013. Evaluasi Dosis Asam Valproat pada Pasien Epilepsi Anak. *Jurnal Manajemen dan Pelayanan Farmasi*, 3: 137–143.

Mei, S., Feng, W., Zhu, L., Li, X., Yu, Y., Yang, W., dkk., 2018. Effect of CYP2C19, UGT1A8, and UGT2B7 on valproic acid clearance in children with epilepsy: a population pharmacokinetic model. *European Journal of Clinical Pharmacology*, 74: 1029–1036.

Meseguer, E.S., Elizalde, M.U., Borobia, A.M., dan Ramírez, E., 2021. Valproic Acid-Induced Liver Injury: A Case-Control Study from a Prospective Pharmacovigilance Program in a Tertiary Hospital. *Journal of Clinical Medicine*, 10: 1–13.

Methaneethorn, J., 2018. A systematic review of population pharmacokinetics of valproic acid. *British Journal of Clinical Pharmacology*, 84: 816–834.

Mithayayi, P.A.P. dan Mahalini, D.S., 2020. Karakteristik Faktor-faktor yang berhubungan dengan epilepsi pada anak di Departemen Ilmu Kesehatan Anak Fakultas Kedokteran Universitas Udayana/RSUP Sanglah Denpasar. *Jurnal Medika Udayana*, 9: 80–85.

Mizorogi, S., Kanemura, H., Sano, F., Sugita, K., dan Aihara, M., 2015. Risk factors for seizure recurrence in children after first unprovoked seizure: Risk factors for seizure recurrence. *Pediatrics International*, 57: 665–669.

Nakashima, H., Oniki, K., Nishimura, M., Oguisu, N., Shimomasuda, M., Ono, T., dkk., 2015. Determination of the Optimal Concentration of Valproic Acid in Patients with Epilepsy: A Population Pharmacokinetic-Pharmacodynamic Analysis. *PLOS ONE*, 10: e0141266.

Nasution, G.T.D., Sobana, S.A., dan Lubis, L., 2020. Karakteristik anak epilepsi di Sekolah Luar Biasa Negeri (SLBN) Cileunyi Bandung tahun 2018. *Bali Anatomy Journal*, 3: 1–10.



Nguyen, V.H.V., Dergalust, S., dan Chang, E., 2020. Epilepsy, dalam:

Pharmacotherapy: A Pathophysiologic Approach. McGraw-Hill Education, USA.

NICE, 2022. 'Epilepsies in children, young people and adults', , dalam: *NICE Guideline*. National Institute for Health and Care Excellence, hal. 1–154.

Nugraha, I.K.P.N., Anita Purnamayanti, Purnamayanti, A., I Gusti Ngurah Made Suwarba, Suwarba, I.G.N.M., Nani Parfati, dkk., 2021. Developing pharmacokinetics-pharmacodynamics model of valproic acid syrup based on prediction of population pharmacokinetics parameter and seizure frequency in Indonesian pediatric epilepsy outpatients. *Journal of basic and clinical physiology and pharmacology*, 32: 305–311.

Pai, V.B. dan Nahata, M.C., 2017. Drug Dosing in Pediatric Patients, dalam: *Clinical Pharmacokinetics*. ashp Publications, Arizona, hal. 65–82.

Permana, Y.N., Putranti, A.H., dan Setiawan, H., 2020. Faktor-faktor yang Memengaruhi Gambaran Elektroensefalografi Interiktal Anak Epilepsi. *Sari Pediatri*, 22: 13–17.

Permatananda, P.A.N.K., 2022. Perbandingan Kualitas Hidup Pasien Epilepsi yang Mendapat Monoterapi dan Politerapi. *Syntax Literate ; Jurnal Ilmiah Indonesia*, 7: 913.

Rahmatullah, S.W., Hakim, L., dan Prawantara, I.D.P., 2013. Perkiraan Kadar Fenitoin dalam Darah dan Hasil Terapi pada Pasien Epilepsi. *Jurnal Manajemen dan Pelayanan Farmasi*, 3: 132–136.



Romoli, M., Mazzocchetti, P., D'Alonzo, R., Siliquini, S., Rinaldi, V.E., Verrotti,

A., dkk., 2019. Valproic Acid and Epilepsy: From Molecular Mechanisms to Clinical Evidences. *Current Neuropharmacology*, 17: 926–946.

Saing, J.H., 2016. Tingkat Pengetahuan, Perilaku, dan Kepatuhan Berobat Orangtua dari Pasien Epilepsi Anak di Medan. *Sari Pediatri*, 12: 103.

Salih, Muhannad R. M., Bahari, Mohd.B., Hassali, M.A.A., Shafie, A.A., Al-lela, O.Q.B., Abd, A.Y., dkk., 2013. Practices Associated with Serum Antiepileptic Drug Level Monitoring at a Pediatric Neurology Clinic: A Malaysian Experience. *Journal of Pharmacy Practice*, 26: 192–197.

Salih, Muhannad R.M., Bahari, Mohd.B., Shafie, A.A., Hassali, M.A.A., Al-lela, O.Q.B., Abd, A.Y., dkk., 2013. Cost-effectiveness analysis for the use of serum antiepileptic drug level monitoring in children diagnosed with structural-metabolic epilepsy. *Epilepsy Research*, 104: 151–157.

Salsabila N., T., Wulandari, M., dan Mustikaningtias, I., 2020. 'Hubungan Estimasi Kadar Asam Valproat Dalam Darah Terhadap Clinical Outcome Pasien Pediatrik Penderita Epilepsi Pada Komunitas Epilepsi Di Indonesia', , Skripsi, . Universitas Jendral Soedirman, Purwokerto.

Savic, I., 2014. Sex differences in human epilepsy. *Experimental Neurology*, 259: 38–43.

Scheffer, I.E., Berkovic, S., Capovilla, G., Connolly, M.B., French, J., Guilhoto, L., dkk., 2017. ILAE Classification of the Epilepsies Position Paper of the



ILAE Commission for Classification and Terminology. *Epilepsia*, 58: 512–521.

Sekarsari, D., Kalanjati, V.P., Machin, A., dan Gunawan, P.I., 2020. Profile of epilepsy patients in Pediatric Ward at Dr. Soetomo General Academic Hospital, Surabaya, Indonesia in the period of January-December 2017. *Majalah Biomorfologi*, 30: 34–38.

Setiabudy, R., 2011. Therapeutic Drug Monitoring: Focus on Conditions in Indonesia. *Therapeutic Drug Monitoring*, 43: 208–211.

Shnayder, N.A., Grechkina, V.V., Khasanova, A.K., Bochanova, E.N., Dontceva, E.A., Petrova, M.M., dkk., 2023. Therapeutic and Toxic Effects of Valproic Acid Metabolites. *Metabolites*, 13: 1–39.

Souza-Oliveira, C., Escosi-Rosset, S., Funayama, S.S., Terra, V.C., Machado, H.R., dan Sakamoto, A.C., 2010. Intellectual functioning in pediatric patients with epilepsy: a comparison of medically controlled, medically uncontrolled and surgically controlled children. *Jornal de Pediatria*, 85: 377–383.

Specchio, N., Wirrell, E.C., Scheffer, I.E., Nabbout, R., Riney, K., Samia, P., dkk., 2022. International League Against Epilepsy classification and definition of epilepsy syndromes with onset in childhood: Position paper by the ILAE Task Force on Nosology and Definitions. *Epilepsia*, 63: 1398–1442.



- Suryoputri, M.W., 2014. 'Evaluasi Dosis Asam Valproat Pada Pasien Epilepsi Anak Di Bangsal Rawat Inap Anak Rsup Dr. Sardjito Yogyakarta', , *Tesis*, . Universitas Gadjah Mada, Yogyakarta.
- Suryoputri, M.W., Endriastuti, N.E., dan Ilma, D.L., 2021. Effects of Antiepileptic Drug Levels on Clinical Outcomes in Pediatric Patients Using Pharmacokinetics Approach. *Indonesian Journal of Clinical Pharmacy*, 10: 272–288.
- Suwarba, I.G.N.M., 2011. Insidens Dan Karakteristik Klinis Epilepsi Anak. *Sari Pediatri*, 13: 123–128.
- Takami, Y. dan Nakagawa, T., 2021. Risk of seizure recurrence after a first unprovoked seizure in childhood. *Brain and Development*, 43: 843–850.
- Tam, V.H., 2016. Application of Pharmacokinetics to Clinical Situations, dalam: *Applied Biopharmaceutics and Pharmacokinetics*. McGraw-Hill Education, USA.
- Triono, A. dan Herini, E.S., 2016. Faktor Prognostik Kegagalan Terapi Epilepsi pada Anak dengan Monoterapi. *Sari Pediatri*, 16: 248–253.
- Ugawa, Y., 2018. Epilepsies in Children and Adolescents and Their Treatment, dalam: *Clinical Practice Guidelines for Epilepsy 2018*. Igaku-Shoin Ltd., Japan, hal. 33–40.
- Vaja, R. dan Rana, M., 2020. Drugs and the liver. *Anaesthesia & Intensive Care Medicine*, 21: 517–523.



UNIVERSITAS
GADJAH MADA

Hubungan Kesesuaian Estimasi Kadar Obat Dalam Darah Penggunaan Asam Valproat Terhadap Tercapainya

Remisi Pada Pasien Epilepsi Anak

Muh. Faris Hidayat, Dr. apt. Purwantiningsih, S.Si.,M.Si. ; Dr. dr. Rizaldy Taslim Pinzon, Sp.S.,M.Kes.

Universitas Gadjah Mada, 2024 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Visudtibhan, A., Bhudhisawadi, K., Vaewpanich, J., Chulavatnatol, S., dan

Kaojareon, S., 2011. Pharmacokinetics and clinical application of intravenous valproate in Thai epileptic children. *Brain and Development*, 33: 189–194.

Wang, Y., Hu, W., dan Li, Z., 2020. Influence of age and co-medication on the concentration and efficacy of valproic acid in Chinese epilepsy children.

Pakistan Journal of Pharmaceutical Sciences, 33: 537–542.

WHO, 2019. Epilepsy: Report by the Director-General.

Yu, A.B.C. dan Shargel, L., 2016. Nonlinier Pharmacokinetics, dalam: *Applied Biopharmaceutics and Pharmacokinetics*. McGraw-Hill Education, USA.

Zaccara, G. dan Perucca, E., 2014. Interactions between antiepileptic drugs, and between antiepileptic drugs and other drugs. *Epileptic Disorders*, 16: 409–431.