

DAFTAR PUSTAKA

- Abdi, H., Azizi, F., & Amouzegar, A. (2018). Insulin monotherapy versus insulin combined with other glucose-lowering agents in type 2 diabetes: A narrative review. *International Journal of Endocrinology and Metabolism*, 16(2). <https://doi.org/10.5812/ijem.65600>
- Abohamr, S. I., Abazid, R. M., Aldossari, M. A., Amer, H. A., Badhawi, O. S., Aljunaidi, O. M., Alzarzour, S. H., Saadeddin, H. M., Bhat, F. A., & Elsheikh, E. (2020). Clinical characteristics and in-hospital mortality of covid-19 adult patients in saudi arabia. *Saudi Medical Journal*, 41(11), 1217–1226. <https://doi.org/10.15537/smj.2020.11.25495>
- Adhikari, S. P., Meng, S., Wu, Y. J., Mao, Y. P., Ye, R. X., Wang, Q. Z., Sun, C., Sylvia, S., Rozelle, S., Raat, H., & Zhou, H. (2020). Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: A scoping review. *Infectious Diseases of Poverty*, 9(1), 1–12. <https://doi.org/10.1186/s40249-020-00646-x>
- Afzal, A. (2020). Molecular diagnostic technologies for COVID-19: Limitations and challenges. *Journal of Advanced Research*, 26(xxxx), 149–159. <https://doi.org/10.1016/j.jare.2020.08.002>
- Agristika, A., & Carolina, N. (2017). Agonis Reseptor GLP 1 untuk Terapi Diabetes MeMüller, T. D., Finan, B., Bloom, S. R., D'Alessio, D., Drucker, D. J., Flatt, P. R., ... Tschöp, M. H. (2019). Glucagon-like peptide 1 (GLP-1). *Molecular Metabolism*, 30(September), 72–130. <https://doi.org/10.1016/j.agromed.2019.07.004>
- Aisyiyah, P., Heriyani, F., Nurrasyidah, I., Noor, M. S., & Wasilah, S. (2022). Hubungan Komorbid Dengan Kejadian COVID-19. *Homeostasis*, 5(1), 87–94.
- Aleem, A. W., Syed, U. A. M., Nicholson, T., Getz, C. L., Namdari, S., Beredjiklian, P. K., & Abboud, J. A. (2017). Blood glucose levels in diabetic patients following corticosteroid injections into the subacromial space of the shoulder. *Archives of Bone and Joint Surgery*, 5(5), 315–321. <https://doi.org/10.22038/abjs.2017.21412.1549>
- Aljuhani, O., Korayem, G. B., Altebainawi, A. F., AlMohammady, D., Alfahed, A., Altebainawi, E. F., Aldhaeefi, M., Badreldin, H. A., Vishwakarma, R., Almutairi, F. E., Alenazi, A. A., Alsulaiman, T., Alqahtani, R. A., Al Dhahri, F., Aldardeer, N., Alenazi, A. O., Al Harbi, S., Kensara, R., Alalawi, M., & Al Sulaiman, K. (2024). Dexamethasone versus methylprednisolone for multiple organ dysfunction in COVID-19 critically ill patients: a multicenter propensity score matching study. *BMC Infectious Diseases*, 24(1).

<https://doi.org/10.1186/s12879-024-09056-y>

Alshammari, S., AlMasoudi, A. S., AlBuhayri, A. H., AlAtwi, H. M., AlHwiti, S. S., Alaidi, H. M., Alshehri, A. M., Alanazi, N. A., Aljabri, A., & Al-Gayyar, M. M. (2023). Effect of COVID-19 on Glycemic Control, Insulin Resistance, and pH in Elderly Patients With Type 2 Diabetes. *Cureus*, 15(2). <https://doi.org/10.7759/cureus.35390>

Andreani, F. V., Belladonna, M., & Hendrianingtyas, M. (2018). Hubungan antara gula darah sewaktu dan puasa dengan perubahan skor Nihss pada stroke iskemik akut. *Jurnal Kedokteran Diponegoro*, 7(1), 185–198.

Angus, D. C., Derde, L., Al-Beidh, F., Annane, D., Arabi, Y., Beane, A., Van Bentum-Puijk, W., Berry, L., Bhimani, Z., Bonten, M., Bradbury, C., Brunkhorst, F., Buxton, M., Buzgau, A., Cheng, A. C., De Jong, M., Detry, M., Estcourt, L., Fitzgerald, M., ... Gordon, A. C. (2020). Effect of Hydrocortisone on Mortality and Organ Support in Patients with Severe COVID-19: The REMAP-CAP COVID-19 Corticosteroid Domain Randomized Clinical Trial. *JAMA - Journal of the American Medical Association*, 324(13), 1317–1329. <https://doi.org/10.1001/jama.2020.17022>

Artika, I. M., Wiyatno, A., & Ma'roef, C. N. (2020). Pathogenic viruses: Molecular detection and characterization. *Infection, Genetics and Evolution*, 81(January). <https://doi.org/10.1016/j.meegid.2020.104215>

Asisyifa, N., Dewi, S., Sari, P., & Martalena, D. (2023). Association between blood glucose levels at admission and severity of COVID-19 patients. 55(4), 298–305.

Bello-Chavolla, O. Y., Bahena-López, J. P., Antonio-Villa, N. E., Vargas-Vázquez, A., González-Díaz, A., Márquez-Salinas, A., Fermín-Martínez, C. A., Naveja, J. J., & Aguilar-Salinas, C. A. (2020). Predicting Mortality Due to SARS-CoV-2: A Mechanistic Score Relating Obesity and Diabetes to COVID-19 Outcomes in Mexico. *Journal of Clinical Endocrinology and Metabolism*, 105(8), 2752–2761. <https://doi.org/10.1210/clinem/dgaa346>

Besteiro, B., Coutinho, D., Gomes, F., Almeida, M., & Almeida, J. (2021). Review of the Prognosis Factors of COVID-19 Infection. *Advances in Infectious Diseases*, 11(02), 196–215. <https://doi.org/10.4236/aid.2021.112019>

Blonna, D., Bonasia, D. E., Mattei, L., Bellato, E., Greco, V., & Rossi, R. (2018). Efficacy and safety of subacromial corticosteroid injection in type 2 diabetic patients. *Pain Research and Treatment*, 2018. <https://doi.org/10.1155/2018/9279343>

Cardoza-Jiménez, K.J., Carranza-Zavala, B., Manrique-Franco, K., Espinoza-Morales, F. and Mejia, C. R. (2021). Daily glucose variation influenced by the

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**PERBEDAAN GULA DARAH SEWAKTU SEBELUM DAN SESUDAH PEMBERIAN
KORTIKOSTEROID PADA PASIEN COVID-19 DENGAN KOMORBID DM TIPE 2 DI RSUP
PERSAHABATAN TAHUN 2020-2021**

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[www.upnvj.ac.id-www.library.upnvj.ac.id-www.repository.upnvj.ac.id]

- use of corticosteroids in COVID-19 patients treated in Lima-Peru. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 15(4). <https://doi.org/10.1016/j.dsx.2021.102188>
- Chen, G. H., Lin, J. L., & Huang, Y. K. (2002). Combined methylprednisolone and dexamethasone therapy for paraquat poisoning. *Critical Care Medicine*, 30(11), 2584–2587. <https://doi.org/10.1097/00003246-200211000-00030>
- Choudhry, M. N., Malik, R. A., & Charalambous, C. P. (2016). Blood glucose levels following intra-articular steroid injections in patients with diabetes: A systematic review. *JBJS Reviews*, 4(3), 1–6. <https://doi.org/10.2106/JBJS.RVW.O.00029>
- Damo, N. Y., Porotu'o, J. P., Rambert, G. I., & Rares, F. E. S. (2021). Diagnostik Coronavirus Disease 2019 (COVID-19) dengan Pemeriksaan Laboratorium Mikrobiologi Klinik. *Jurnal E-Biomedik*, 9(1), 77–86. <https://doi.org/10.35790/ebm.v9i1.31899>
- Dastenae, Z. H., Bahadori, A., Dehghani, M., Asadi-Samani, M., Izadi, I., & Shahraki, H. R. (2022). Comparison of the effect of intravenous dexamethasone and methylprednisolone on the treatment of hospitalized patients with COVID-19: a randomized clinical trial. *International Journal of Infectious Diseases*, 122, 659–664. <https://doi.org/10.1016/j.ijid.2022.07.019>
- Elvidge, S. (2016). Insulin and metformin in combination cut mortality in type 2 diabetes. *Pharmaceutical Journal*, May, 2–4. <https://doi.org/10.1211/pj.2016.20201133>
- Erener, S. (2020). DIABETES , INFECTION RISK AND COVID-19. *Molecular Metabolism*, 101044. <https://doi.org/10.1016/j.molmet.2020.101044>
- Fatima, S. A., Asif, M., Khan, K. A., Siddique, N., & Khan, A. Z. (2020). Comparison of efficacy of dexamethasone and methylprednisolone in moderate to severe covid 19 disease. *Annals of Medicine and Surgery*, 60(November), 413–416. <https://doi.org/10.1016/j.amsu.2020.11.027>
- Fernandez, C., Rysä, J., Almgren, P., Nilsson, J., Engström, G., Orho-Melander, M., Ruskoaho, H., & Melander, O. (2018). Plasma levels of the proprotein convertase furin and incidence of diabetes and mortality. *Journal of Internal Medicine*, 284(4), 377–387. <https://doi.org/10.1111/joim.12783>
- Galicia-Garcia, U., Benito-Vicente, A., Jebari, S., Larrea-Sebal, A., Siddiqi, H., Uribe, K. B., Ostolaza, H., & Martín, C. (2020). Pathophysiology of type 2 diabetes mellitus. *International Journal of Molecular Sciences*, 21(17), 1–34. <https://doi.org/10.3390/ijms21176275>
- Gendokesumo, M. E., Putra, G. S., Anwari, F., Widianat, W., & Elysia, M. (2022).

Studi In-silico menghambat enzim α -glukosidase pada fitokimia yang terkandung pada Momordica charantia Linn. (Pare) sebagai terapi diabetes.
Akta Kimia Indonesia, 7(1), 77.
<https://doi.org/10.12962/j25493736.v7i1.12588>

Gunardi, W. D. (2021). Pemeriksaan Diagnosis Laboratorium COVID-19: Keterbatasan dan Tantangannya Saat Ini. *Jurnal Kedokteran Meditek*, 27(2), 173–182. <https://doi.org/10.36452/jkdoktmeditek.v27i2.2036>

Habib, G. S., & Abu-Ahmad, R. (2007). Lack of effect of corticosteroid injection at the shoulder joint on blood glucose levels in diabetic patients. *Clinical Rheumatology*, 26(4), 566–568. <https://doi.org/10.1007/s10067-006-0353-8>

Hamid, S., Mir, M. Y., & Rohela, G. K. (2020). Novel coronavirus disease (COVID-19): a pandemic (epidemiology, pathogenesis and potential therapeutics). *New Microbes and New Infections*, 35, 100679. https://doi.org/10.1016/j_nmni.2020.100679

Hardianto, D. (2021a). Insulin: Production, Types, Analysis, and Routes of Delivery. *Jurnal Bioteknologi & Biosains Indonesia*, 8(2), 321–331. <http://ejurnal.bppt.go.id/index.php/JBBI>

Hardianto, D. (2021b). Telaah Komprehensif Diabetes Melitus: Klasifikasi, Gejala, Diagnosis, Pencegahan, Dan Pengobatan. *Jurnal Bioteknologi & Biosains Indonesia (JBBI)*, 7(2), 304–317. <https://doi.org/10.29122/jbbi.v7i2.4209>

Hasanah, N., Ismaya, N. A., Tulandi, S. M., Permatasari, P. I., Wafa, W., & Hakim, A. N. (2023). COVID-19 and Diabetes Mellitus at RSU South Tangerang-Indonesia: Clinical Profile and Treatment Strategies. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 9(2), 119–131. <https://doi.org/10.22487/j24428744.2023.v9.i2.15989>

Hertanto, D. M., Sutanto, H., Wiratama, B. S., & Wungu, C. D. K. (2021). Modulating the host immune response to fight against COVID-19: Where are we in 2021? *Virulence*, 12(1), 1732–1736. <https://doi.org/10.1080/21505594.2021.1943275>

Hong, S., Wang, H., Li, S., Liu, J., & Qiao, L. (2023). A systematic review and meta-analysis of glucocorticoids treatment in severe COVID-19: methylprednisolone versus dexamethasone. *BMC Infectious Diseases*, 23(1), 1–17. <https://doi.org/10.1186/s12879-023-08280-2>

Hong, S., Wang, H., Zhang, Z., & Qiao, L. (2022). The roles of methylprednisolone treatment in patients with COVID-19: A systematic review and meta-analysis. *Steroids*, January. [https://doi.org/https://doi.org/10.1016/j.steroids.2022.109022 R](https://doi.org/https://doi.org/10.1016/j.steroids.2022.109022)

- Horby, P., et al. (2020). Effect of dexamethasone in hospitalized patients with COVID-19: preliminary report. *MedRxiv*, 22, 2020. <https://www.medrxiv.org/content/10.1101/2020.06.22.20137273.abstract>
- Huang, I., Lim, M. A., & Pranata, R. (2020). Diabetes mellitus is associated with increased mortality and severity of disease in COVID-19 pneumonia – A systematic review, meta-analysis, and meta-regression: Diabetes and COVID-19. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 14(4), 395–403. <https://doi.org/10.1016/j.dsx.2020.04.018>
- Johns, M., George, S., Taburyanskaya, M., & Poon, Y. K. (2022). A Review of the Evidence for Corticosteroids in COVID-19. *Journal of Pharmacy Practice*, 35(4), 626–637. <https://doi.org/10.1177/0897190021998502>
- Jour, Rhou, Y. J. J., Hor, A., Wang, M., Wu, Y.-F., Chipps, D. R., & Cheung, N. W. (2022). Dexamethasone-Induced Hyperglycemia in Nondiabetic Patients with COVID-19. *Diabetes*, 71. <https://doi.org/https://doi.org/10.2337/db22-266-OR>
- Karyono, D. R., & Wicaksana, A. L. (2020). Current prevalence, characteristics, and comorbidities of patients with COVID-19 in Indonesia. *Journal of Community Empowerment for Health*, 3(2), 77. <https://doi.org/10.22146/jcoemph.57325>
- Keliki, N., Kumaladewi H, H., & Sari, R. W. (2022). Karakteristik Faktor Risiko Host Terhadap Tingginya Angka Kejadian Covid-19 Di Kabupaten Pinrang Sulawesi Selatan. *Tirtayasa Medical Journal*, 1(2), 40. <https://doi.org/10.52742/tmj.v1i2.12483>
- Kenneth McIntosh, M., Martin S Hirsch, M., & Allyson Bloom, M. (2020). Coronavirus disease 2019 (COVID-19). UpToDate Hirsch MS, Bloom A (Eds) Accessed Mar. 2020;5. *UpToDate*, 2019, 1–27. https://www.cmim.org/PDF_covid/Coronavirus_disease2019_COVID-19_UpToDate2.pdf
- Kulcsar, K. A., Coleman, C. M., Beck, S. E., & Frieman, M. B. (2019). Comorbid diabetes results in immune dysregulation and enhanced disease severity following MERS-CoV infection. *JCI Insight*, 4(20). <https://doi.org/10.1172/jci.insight.131774>
- Lestari, Zulkarnain, & Sijid, S. A. (2021). Diabetes Melitus: Review Etiologi, Patofisiologi, Gejala, Penyebab, Cara Pemeriksaan, Cara Pengobatan dan Cara Pencegahan. *UIN Alauddin Makassar, November*, 237–241. <http://journal.uin-alauddin.ac.id/index.php/psb>
- Li, G., Fan, Y., Lai, Y., Han, T., Li, Z., Zhou, P., Pan, P., Wang, W., Hu, D., Liu, X., Zhang, Q., & Wu, J. (2020). Coronavirus infections and immune

- responses. *Journal of Medical Virology*, 92(4), 424–432. <https://doi.org/10.1002/jmv.25685>
- Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., Ren, R., Leung, K. S. M., Lau, E. H. Y., Wong, J. Y., Xing, X., Xiang, N., Wu, Y., Li, C., Chen, Q., Li, D., Liu, T., Zhao, J., Liu, M., ... Feng, Z. (2020). Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus–Infected Pneumonia. *New England Journal of Medicine*, 382(13), 1199–1207. <https://doi.org/10.1056/nejmoa2001316>
- Li, X., Geng, M., Peng, Y., Meng, L., & Lu, S. (2020). Molecular immune pathogenesis and diagnosis of COVID-19. *Journal of Pharmaceutical Analysis*, 10(2), 102–108. <https://doi.org/10.1016/j.jpha.2020.03.001>
- Lim, S., Bae, J. H., Kwon, H. S., & Nauck, M. A. (2021). COVID-19 and diabetes mellitus: from pathophysiology to clinical management. *Nature Reviews Endocrinology*, 17(1), 11–30. <https://doi.org/10.1038/s41574-020-00435-4>
- Limbachia, V., Nunney, I., Page, D. J., Barton, H. A., Patel, L. K., Thomason, G. N., Green, S. L., Lewis, K. F. J., & Dhatriya, K. (2024). The effect of different types of oral or intravenous corticosteroids on capillary blood glucose levels in hospitalized inpatients with and without diabetes. *Clinical Therapeutics*, 46(2), e59–e63. <https://doi.org/10.1016/j.clinthera.2023.11.013>
- Liu, W., Tao, Z. W., Wang, L., Yuan, M. L., Liu, K., Zhou, L., Wei, S., Deng, Y., Liu, J., Liu, H. G., Yang, M., & Hu, Y. (2020). Analysis of factors associated with disease outcomes in hospitalized patients with 2019 novel coronavirus disease. *Chinese Medical Journal*, 133(9), 1032–1038. <https://doi.org/10.1097/CM9.0000000000000775>
- Liu, Y., Ning, Z., Chen, Y., Guo, M., Liu, Y., Gali, N. K., Sun, L., Duan, Y., Cai, J., Westerdahl, D., Liu, X., Ho, K.-F., Kan, H., Fu, Q., & Lan, K. (2020). Aerodynamic characteristics and RNA concentration of SARS-CoV-2 aerosol in Wuhan hospitals during COVID-19 outbreak. *BioRxiv*, 86(21). <https://doi.org/10.1101/2020.03.08.982637>
- Longaker, L., & Clements, J. N. (2022). Evidence-Based Management of Steroid-Induced Hyperglycemia in the Inpatient Setting. *ADCES in Practice*, 10(1), 40–45. <https://doi.org/10.1177/2633559x211056902>
- Lotfi, M., Hamblin, M. R., & Rezaei, N. (2020). COVID-19: Transmission, prevention, and potential therapeutic opportunities. *Clinica Chimica Acta*, 508(May), 254–266. <https://doi.org/10.1016/j.cca.2020.05.044>
- Lukito, J. I. (2021). Antidiabetik Oral Kombinasi Penghambat DPP-4 dan Penghambat SGLT-2. *Cermin Dunia Kedokteran*, 48(12), 692. <https://doi.org/10.55175/cdk.v48i12.1572>

- Maddaloni, E., & Buzzetti, R. (2020). Covid-19 and diabetes mellitus: unveiling the interaction of two pandemics. *Diabetes/Metabolism Research and Reviews*, 36(7), 19–20. <https://doi.org/10.1002/dmrr.3321>
- Mahardhika, G. S. (2021). Hyperglycemia Induced by COVID-19 with and without Present Diabetes: A Systematic Review. *KELUWIH: Jurnal Kesehatan Dan Kedokteran*, 2(2), 64–74. <https://doi.org/10.24123/kesdok.v2i2.4431>
- Malihah, D., & Emelia, R. (2020). Pola Pengobatan Antidiabetes Terhadap Pasien Diabetes Melitus Tipe II Rawat Jalan di RSAU dr.M. Salamun. *Jurnal Delima Harapan* 2022, 7(September), 31–38.
- Masdalena, Muryanto, I., Efendi, A. S., Yunita, J., & Gustina, T. (2021). Faktor Risiko Komorbid Pada Kematian Covid-19 Di Rumah Sakit X Pekanbaru Tahun 2021. *Jurnal Kesehatan Masyarakat Mulawarman*, 3(2), 105–117. https://pusdatin.kemkes.go.id/resources/download/pusdatin/buletin/buletin-Situasi-Covid-19_opt.pdf
- Mehta, J., Rolta, R., Mehta, B. B., Kaushik, N., Choi, E. H., & Kaushik, N. K. (2022). Role of Dexamethasone and Methylprednisolone Corticosteroids in Coronavirus Disease 2019 Hospitalized Patients: A Review. *Frontiers in Microbiology*, 13(February), 1–17. <https://doi.org/10.3389/fmicb.2022.813358>
- Meryta, A., Fiddia, F., & Swity, A. (2023). Penggunaan Antidiabetik Oral pada Pasien Diabetes Melitus Tipe II di Instalasi Farmasi Rumah Sakit Pinna Bekasi. *Jurnal Farmasi IKIFA*, 2(1), 46–53.
- Morris, D. (2018). Steroid-induced diabetes and hyperglycaemia. Part 1: mechanisms and risks Article points. *Diabetes & Primary Care*, 20, 151–153. <http://bit.ly/2QBUnaV>
- Natalie, V. P., Lay, D. S., Sitanggang, F. P., Laksminingsih, N. S., & Martadiani, E. D. (2023). HUBUNGAN ANTARA HIPERTENSI DENGAN KEJADIAN COVID-19 YANG BERGEJALA DI RSUP SANGLAH TAHUN 2020. *Jurnal Medika Udayana*, 12(2), 51–56.
- Noreen, S., Maqbool, I., & Madni, A. (2020). Dexamethasone: Therapeutic potential, risks, and future projection during COVID-19 pandemic. *European Journal of Pharmacology*, January. <https://doi.org/https://doi.org/10.1016/j.ejphar.2021.173854>
- Pantow, D. I. J., & Tatura, Suryadi, J. E. N. (2022). Hubungan Antara Umur Dan Jenis Kelamin Dengan Penerimaan Vaksinasi Covid-19 Di Wilayah Kerja Puskesmas Kawangkoan Barat. *Health Care : Jurnal Kesehatan*, 11(2), 374–380.

- PERKENI. (2021). Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 Dewasa di Indonesia 2021. In *PB PERKENI*. <https://pbperkeni.or.id/wp-content/uploads/2021/11/22-10-21-Website-Pedoman-Pengelolaan-dan-Pencegahan-DMT2-Ebook.pdf>
- Petrilli, C., Jones, S. A., Yang, J., Rajagopalan, H., O'Donnell, L., Chernyak, Y., Tobin, K. A., Cerfolio, R. J., Francois, F., & Horwitz, L. I. (2020). *Factors associated with hospitalization and critical illness among 4,103 patients with Covid-19 disease in New York City.* 646. <https://doi.org/https://doi.org/10.1101/2020.04.08.20057794>; t
- Pulakurthi, Y. S., Pederson, J. M., Saravu, K., Gupta, N., Balasubramanian, P., Kamrowski, S., Schmidt, M., Vegivinti, C. T. R., Dibas, M., Reierson, N. L., Pisipati, S., Joseph, B. A., Selvan, P. T., Dmytriw, A. A., Keesari, P. R., Sriram, V., Chittajallu, S., Brinjikji, W., Katamreddy, R. R., ... Evanson, K. W. (2021). Corticosteroid therapy for COVID-19. *Medicine*, 100(20), e25719. <https://doi.org/10.1097/md.00000000000025719>
- Rao, S., Lau, A., & So, H. C. (2020). Exploring Diseases/Traits and Blood Proteins Causally Related to Expression of ACE2, the Putative Receptor of SARS-CoV-2: A Mendelian Randomization Analysis Highlights Tentative Relevance of Diabetes-Related Traits. *Diabetes Care*, 43(7), 1416–1426. <https://doi.org/10.2337/dc20-0643>
- Reynaldo, G. (2021). Karakteristik Klinis Serta Pengaruh Reseptor ACE2 dan Sel Natural Killer Terhadap Gejala COVID-19 pada Anak. *Cermin Dunia Kedokteran*, 48(3), 181. <https://doi.org/10.55175/cdk.v48i3.1338>
- Rothan, H. A., & Byrareddy, S. N. (2020). The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak. *Journal of Autoimmunity*, 109(February), 102433. <https://doi.org/10.1016/j.aut.2020.102433>
- Ruhama, R. S., Mahmudah, F., & Sastyarina, Y. (2021). Karakteristik Pasien Terkonfirmasi Coronavirus disease (COVID-19) di RS X Samarinda Periode Maret-Desember 2020. *Proceeding of Mulawarman Pharmaceuticals Conferences, 14(December 2020)*, 262–266. <https://doi.org/10.25026/mpc.v14i1.582>
- Safran, O., Fraind-Maya, G., Kandel, L., Leibowitz, G., & Beyth, S. (2022). The effect of steroid injection into the shoulder on glycemia in patients with type 2 diabetes. *JSES International*, 6(5), 843–848. <https://doi.org/10.1016/j.jseint.2022.05.016>
- Saleh, A., Kunoli, F. J., & Condeng, B. (2021). Faktor Risiko Kejadian Covid-19 di RSUD Undata Palu. *Jurnal Kolaboratif Sains*, 4(12), 648–657. <https://doi.org/10.56338/jks.v4i12.2066>

- Scheen, A. J. (1996). Pharmacokinetic of Metformin. *Clinical Pharmacokinetic*, 30(5), 359–371.
- Setiorini, R. P. (2018). *Penerapan Pendidikan Diit 3j (Jumlah, Jenis, Jadwal) Dm Terhadap Penurunan Kadar Gula Darah Pada Keluarga Dengan Diabetes Mellitus Tipe 2 Di Desa Kedungrandu* [UNIVERSITAS MUHAMMADIYAH PURWOKERTO]. <https://repository.ump.ac.id:80/id/eprint/8288>
- Shi, J., Wen, Z., Zhong, G., Yang, H., Wang, C., Huang, B., Liu, R., He, X., Shuai, L., Sun, Z., Zhao, Y., Liu, P., Liang, L., Cui, P., Wang, J., Zhang, X., Guan, Y., Tan, W., Wu, G., ... Bu, Z. (2020). Susceptibility of ferrets, cats, dogs, and other domesticated animals to SARS-coronavirus 2. *Science*, 368(6494), 1016–1020. <https://doi.org/10.1126/science.abb7015>
- Shi, Q., Zhang, X., Jiang, F., Zhang, X., Hu, N., Bimu, C., Feng, J., Yan, S., Guan, Y., Xu, D., He, G., Chen, C., Xiong, X., Liu, L., Li, H., Tao, J., Peng, Z., & Wang, W. (2020). Clinical Characteristics and Risk Factors for Mortality of COVID-19 Patients with Diabetes in Wuhan, China: A Two-Center, Retrospective Study. *Diabetes Care*, 43(7), 1382–1391. <https://doi.org/10.2337/dc20-0598>
- Shin, W. Y., An, M. J., Im, N. G., Oh, K. R., Choe, Y., Yoon, S. R., & Ryu, S. R. (2020). Changes in blood glucose level after steroid injection for musculoskeletal pain in patients with diabetes. *Annals of Rehabilitation Medicine*, 44(2), 117–124. <https://doi.org/10.5535/arm.2020.44.2.117>
- Singh, A. K., Gupta, R., Ghosh, A., & Misra, A. (2020). Diabetes in COVID-19: Prevalence, pathophysiology, prognosis and practical considerations. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 14(4), 303–310. <https://doi.org/10.1016/j.dsx.2020.04.004>
- Stepan, J. G., London, D. A., Boyer, M. I., & Calfee, R. P. (2014). Blood glucose levels in diabetic patients following corticosteroid injections into the hand and wrist. *Journal of Hand Surgery*, 39(4), 706–712. <https://doi.org/10.1016/j.jhsa.2014.01.014>
- Sugiyono. (2013). Metode Penelitian Kualitatif dan R dan D. In Bandung: Alfabeta (Vol. 3, Issue April). Penerbit Alfabeta Bandung.
- Suh, S., & Park, M. K. (2017). Glucocorticoid-induced diabetes mellitus: An important but overlooked problem. *Endocrinology and Metabolism*, 32(2), 180–189. <https://doi.org/10.3803/EnM.2017.32.2.180>
- Susilo, A., Rumende, C. M., Pitoyo, C. W., Santoso, W. D., Yulianti, M., Herikurniawan, H., Sinto, R., Singh, G., Nainggolan, L., Nelwan, E. J., Chen, G Gina Kamilah, 2024
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- L. K., Widhani, A., Wijaya, E., Wicaksana, B., Maksum, M., Annisa, F., Jasirwan, C. O. M., & Yunihastuti, E. (2020). Coronavirus Disease 2019: Tinjauan Literatur Terkini. *Jurnal Penyakit Dalam Indonesia*, 7(1), 45. <https://doi.org/10.7454/jpdi.v7i1.415>
- Tamez-Pérez, H. E. (2015). Steroid hyperglycemia: Prevalence, early detection and therapeutic recommendations: A narrative review. *World Journal of Diabetes*, 6(8), 1073. <https://doi.org/10.4239/wjd.v6.i8.1073>
- van Paassen, J., Vos, J. S., Hoekstra, E. M., Neumann, K. M. I., Boot, P. C., & Arbous, S. M. (2020). Corticosteroid use in COVID-19 patients: a systematic review and meta-analysis on clinical outcomes. *Critical Care*, 24(1), 1–22. <https://doi.org/10.1186/s13054-020-03400-9>
- Wang, F., Nie, J., Wang, H., Zhao, Q., Xiong, Y., Deng, L., Song, S., Ma, Z., Mo, P., & Zhang, Y. (2020). Characteristics of peripheral lymphocyte subset alteration in covid-19 pneumonia. *Journal of Infectious Diseases*, 221(11), 1762–1769. <https://doi.org/10.1093/INFDIS/JIAA150>
- Wang, L., He, W., Yu, X., Hu, D., Bao, M., Liu, H., Zhou, J., & Jiang, H. (2020). Coronavirus disease 2019 in elderly patients: Characteristics and prognostic factors based on 4-week follow-up. *Journal of Infection*, 80(6), 639–645. <https://doi.org/10.1016/j.jinf.2020.03.019>
- Wang, W., Tang, J., & Wei, F. (2020). Updated understanding of the outbreak of 2019 novel coronavirus (2019-nCoV) in Wuhan, China. *Journal of Medical Virology*, 92(4), 441–447. <https://doi.org/10.1002/jmv.25689>
- Widiasari, K. R., Wijaya, I. M. K., & Suputra, P. A. (2021). Diabetes Melitus Tipe 2: Faktor Risiko, Diagnosis, Dan Tatalaksana. *Ganesha Medicine*, 1(2), 114. <https://doi.org/10.23887/gm.v1i2.40006>
- Wiersinga, W. J., Rhodes, A., Cheng, A. C., Peacock, S. J., & Prescott, H. C. (2020). Pathophysiology, Transmission, Diagnosis, and Treatment of Coronavirus Disease 2019 (COVID-19): A Review. *JAMA - Journal of the American Medical Association*, 324(8), 782–793. <https://doi.org/10.1001/jama.2020.12839>
- Wit, E. De, Doremalen, N. Van, Falzarano, D., & Munster, V. J. (2016). REVIEWS SARS and MERS: recent insights into emerging coronaviruses. *Nature Publishing Group*, 14(8), 523–534. <https://doi.org/10.1038/nrmicro.2016.81>
- World Health Organization (WHO). (2021). *Clinical management of COVID-19* (Issue August).
- Xu, K., He, W., Yu, B., Zhong, K., Zhou, D., & Wang, D. W. (2024). Effects of different treatments for type 2 diabetes mellitus on mortality of coronavirus

- disease from 2019 to 2021 in China: a multi-institutional retrospective study. *Molecular Biomedicine*, 5(1), 1–13. <https://doi.org/10.1186/s43556-024-00183-1>
- Yang, Y., Xiao, Z., Ye, K., He, X., Sun, B., Qin, Z., Yu, J., Yao, J., Wu, Q., Bao, Z., & Zhao, W. (2020). SARS-CoV-2: characteristics and current advances in research. *Virology Journal*, 17(1), 1–17. <https://doi.org/10.1186/s12985-020-01369-z>
- Yeni, F., Zelhendri, Z., & Darmansyah. (2018). *Penilitian Pendidikan*.
- Zahedi, M., Kordrostami, S., Kalantarhormozi, M., & Bagheri, M. (2023). A Review of Hyperglycemia in COVID-19. *Cureus*, 15(4), 15–21. <https://doi.org/10.7759/cureus.37487>
- Zhou, F., Yu, T., Du, R., Fan, G., Liu, Y., Liu, Z., Xiang, J., Wang, Y., Song, B., Gu, X., Guan, L., Wei, Y., Li, H., Wu, X., Xu, J., Tu, S., Zhang, Y., Chen, H., & Cao, B. (2020). Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *The Lancet*, 395(10229), 1054–1062. [https://doi.org/10.1016/S0140-6736\(20\)30566-3](https://doi.org/10.1016/S0140-6736(20)30566-3)