

DAFTAR PUSTAKA

- Ahmed, A.S., Hussain, E., Haleem, S., Ahmed, N., & Latif, A. (2021). Epidemiology of sepsis, based on ICD-9 coding, a tertiary care experience from Pakistan. *Trends Anaesth. Crit. Care* 41 : 37–46.
- Angus, D.C., Kelley, M.A., Schmitz, R.J., White, A., & Popovich, J. (2000). Current and projected workforce requirements for care of the critically III and patients with pulmonary disease: Can we meet the requirements of an aging population? *Jama* 284 : 2762–2770.
- Arendrup, M.C., Maiken, V.I.I., Arendrup, C., Fuursted, K., Gahrn-, B., Jensen, I.M., *et al.* (2011). Candida and Candidaemia Susceptibility and Epidemiology 1–32.
- Arora, J., Mendelson, A.A., & Fox-Robichaud, A. (2023). Sepsis: network pathophysiology and implications for early diagnosis. *Am. J. Physiol. - Regul. Integr. Comp. Physiol.* 324 : R613–R624.
- Ayobami, O., Willrich, N., Harder, T., Okeke, I.N., Eckmanns, T., & Markwart, R. (2019). The incidence and prevalence of hospital-acquired (carbapenem-resistant) *Acinetobacter baumannii* in Europe, Eastern Mediterranean and Africa: a systematic review and meta-analysis. *Emerg. Microbes Infect.* 8 : 1747–1759.
- Badia-cebada, L., Peñafiel, J., Saliba, P., Andrés, M., Càmara, J., Domenech, D., *et al.* (2019). Trends in the epidemiology of catheter-related bloodstream infections; towards a paradigm shift , Spain , 2007 to 2019.
- Baltogianni, M., Giapros, V., & Kosmeri, C. (2023). Antibiotic Resistance and Biofilm Infections in the NICUs and Methods to Combat It. *Antibiotics* 12 : 1–14.
- Bassetti, M., Righi, E., & Carnelutti, A. (2016). Bloodstream infections in the Intensive Care Unit. *Virulence* 7 : 267–279.
- Becker, K., Heilmann, C., & Peters, G. (2014). Coagulase-Negative Staphylococci 889.
- Chávez-Reyes, J., Escárcega-González, C.E., Chavira-Suárez, E., León-Buitimea, A., Vázquez-León, P., Morones-Ramírez, J.R., *et al.* (2021). Susceptibility for Some Infectious Diseases in Patients With Diabetes: The Key Role of Glycemia. *Front. Public Heal.* 9 : 1–18.
- Chen, C.M., Cheng, K.C., Chan, K.S., & Yu, W.L. (2014). Age may not influence the outcome of patients with severe sepsis in intensive care units. *Int. J. Gerontol.* 8 : 22–26.
- Chiang, T.T., Huang, T.W., Sun, J.R., Kuo, S.C., Cheng, A., Liu, C.P., *et al.* (2022). Biofilm formation is not an independent risk factor for mortality in patients with *Acinetobacter baumannii* bacteremia. *Front. Cell. Infect. Microbiol.* 12 : 1–12.

- Dadi, N.C.T., Radochová, B., Vargová, J., & Bujdáková, H. (2021). Impact of healthcare-associated infections connected to medical devices—an update. *Microorganisms* 9.
- Donadu, M.G., Ferrari, M., Mazzarello, V., Zanetti, S., Kushkevych, I., Rittmann, S.K.M.R., *et al.* (2022). No Correlation between Biofilm-Forming Capacity and Antibiotic Resistance in Environmental *Staphylococcus* spp.: In Vitro Results. *Pathogens* 11.
- Donlan, R.M. (2002). Biofilms: Microbial Life on Surfaces, Emerging Infectious Diseases •.
- Evans, L., Rhodes, A., Alhazzani, W., Antonelli, M., Coopersmith, C.M., French, C., *et al.* (2021a). Executive Summary: Surviving Sepsis Campaign: International Guidelines for the Management of Sepsis and Septic Shock 2021. *Crit. Care Med.* 49 : 1974–1982.
- Evans, L., Rhodes, A., Alhazzani, W., Antonelli, M., Coopersmith, C.M., French, C., *et al.* (2021b). Surviving sepsis campaign: international guidelines for management of sepsis and septic shock 2021. *Intensive Care Med.* 47 : 1181–1247.
- Fleischmann, C., Scherag, A., Adhikari, N.K.J., Hartog, C.S., Tsaganos, T., Schlattmann, P., *et al.* (2016). Assessment of global incidence and mortality of hospital-treated sepsis current estimates and limitations. *Am. J. Respir. Crit. Care Med.* 193 : 259–272.
- Flemming, H.C., & Wingender, J. (2010). The biofilm matrix. *Nat. Rev. Microbiol.* 8 : 623–633.
- Flemming, H.C., Wingender, J., Szewzyk, U., Steinberg, P., Rice, S.A., & Kjelleberg, S. (2016). Biofilms: An emergent form of bacterial life. *Nat. Rev. Microbiol.* 14 : 563–575.
- Girard, T.D., Opal, S.M., & Ely, E.W. (2005). Insights into severe sepsis in older patients: From epidemiology to evidence-based management. *Clin. Infect. Dis.* 40 : 719–727.
- Grondman, I. (2023). Immune and Metabolic Dysregulation in Sepsis. Radboud Repository.
- Gupta, E., Saxena, J., Kumar, S., Sharma, U., Rastogi, S., Srivastava, V.K., *et al.* (2023). Fast Track Diagnostic Tools for Clinical Management of Sepsis: Paradigm Shift from Conventional to Advanced Methods. *Diagnostics* 13 : 1–23.
- Gyawali, B., Ramakrishna, K., & Dhamoon, A.S. (2019). Sepsis : The evolution in definition , pathophysiology , and management.
- Harding, C.M., Hennon, S.W., & Feldman, M.F. (2018). Uncovering the mechanisms of *Acinetobacter baumannii* virulence. *Nat. Rev. Microbiol.* 16 : 91–102.
- Hestiyani, R.A.N., Siswandari, W., Indriani, V., Peramiarti, I.D.S.A.P., Anjarwati, D.U., & Prihartini, H. (2022). Antibiotic resistance of biofilm-producing bacteria from

- sepsis patients in Prof. Dr. Margono Soekarjo Hospital, Purwokerto, Central Java. *J. Med. Sci. (Berkala Ilmu Kedokteran)* 54.
- Høiby, N., Bjarnsholt, T., Moser, C., Bassi, G.L., Coenye, T., Donelli, G., *et al.* (2015). ESCMID* guideline for the diagnosis and treatment of biofilm infections 2014. *Clin. Microbiol. Infect.* 21 : S1–S25.
- Hotchkiss, R.S., Tinsley, K.W., Swanson, P.E., Schmieg, R.E., Hui, J.J., Chang, K.C., *et al.* (2001). Sepsis-Induced Apoptosis Causes Progressive Profound Depletion of B and CD4+ T Lymphocytes in Humans. *J. Immunol.* 166 : 6952–6963.
- Irfani, Q.I., Aman, A.T., & Wibawa, T. (2023). Analisis Pola Kuman dan Faktor Risiko Bakteriemia di Ruang Perawatan Intensif Dewasa RSUP Dr Soeradji Tirtonegoro Klaten.
- Juliana, A., Leela, K. V., Gopinathan, A., & Jayaprakash, T. (2022). Biofilm Formation and its Association with Gram Negative Sepsis Pathogenicity. *Biomed. Pharmacol. J.* 15 : 2099–2106.
- Koo, H., Allan, R.N., Howlin, R.P., Hall-Stoodley, L., & Stoodley, P. (2018). Targeting microbial biofilms: current and prospective therapeutic strategies. *Physiol. Behav.* 176 : 139–148.
- Leligdowicz, A., Dodek, P.M., Norena, M., Wong, H., Kumar, Aseem, & Kumar, Anand (2014). Association between source of infection and hospital mortality in patients who have septic shock. *Am. J. Respir. Crit. Care Med.* 189 : 1204–1213.
- Levy, M.M., Evans, L.E., & Rhodes, A. (2018). The Surviving Sepsis Campaign Bundle: 2018 update. *Intensive Care Med.* 44 : 925–928.
- Magiorakos, A.P., Srinivasan, A., Carey, R.B., Carmeli, Y., Falagas, M.E., Giske, C.G., *et al.* (2012). Multidrug-resistant, extensively drug-resistant and pandrug-resistant bacteria: An international expert proposal for interim standard definitions for acquired resistance. *Clin. Microbiol. Infect.* 18 : 268–281.
- Mahenthiralingam, E., Baldwin, A., & Dowson, C.G. (2008). Burkholderia cepacia complex bacteria : opportunistic pathogens with important natural biology 104 : 1539–1551.
- Manyahi, J., Joachim, A., Msafiri, F., Migiro, M., Mwingwa, A., Kasubi, M., *et al.* (2024). Polymicrobial bloodstream infections a risk factor for mortality in neonates at the national hospital, Tanzania: A case-control study. *PLoS One* 19 : 1–10.
- Mermel, L.A., Allon, M., Bouza, E., Craven, D.E., Flynn, P., O’Grady, N.P., *et al.* (2009). Clinical practice guidelines for the diagnosis and management of intravascular catheter-related infection: 2009 update by the infectious diseases society of America. *Clin. Infect. Dis.* 49 : 1–45.
- Minasyan, H. (2019). Sepsis : mechanisms of bacterial injury to the patient 1–22.

- Mursinah, M., Ibrahim, F., & Wahid, M.H. (2016). Risk Factors and Scoring Systems for Patients with Candidemia at a Tertiary Hospital in Jakarta, Indonesia. *Acta Med. Indones.* 48 : 193–199.
- Nagy, E., Boyanova, L., & Justesen, U.S. (2018). How to isolate, identify and determine antimicrobial susceptibility of anaerobic bacteria in routine laboratories. *Clin. Microbiol. Infect.* 24 : 1139–1148.
- Naziri, Z., Kilegolani, J.A., Moezzi, M.S., & Derakhshandeh, A. (2021). Biofilm formation by uropathogenic *Escherichia coli*: a complicating factor for treatment and recurrence of urinary tract infections. *J. Hosp. Infect.* 117 : 9–16.
- Nguyen, M., & Joshi, S.G. (2021). Carbapenem resistance in *Acinetobacter baumannii*, and their importance in hospital-acquired infections: a scientific review. *J. Appl. Microbiol.* 131 : 2715–2738.
- Nirwati, H., Sinanjung, K., Fahrurrisa, F., Wijaya, F., Napitupulu, S., Hati, V.P., *et al.* (2019). Biofilm formation and antibiotic resistance of *Klebsiella pneumoniae* isolated from clinical samples in a tertiary care hospital, Klaten, Indonesia. *BMC Proc.* 13.
- Pang, Z., Raudonis, R., Glick, B.R., Lin, T.J., & Cheng, Z. (2019). Antibiotic resistance in *Pseudomonas aeruginosa*: mechanisms and alternative therapeutic strategies. *Biotechnol. Adv.* 37 : 177–192.
- Pérez-viso, B., Hernández-garcía, M., Rodríguez, C.M., Fernández-de-bobadilla, M.D., Isabel, M., Sánchez-díaz, A.M., *et al.* (2024). A long-term survey of *Serratia* spp. bloodstream infections revealed an increase of antimicrobial resistance involving adult population 12 : 1–11.
- Permatahati, V., Nirwati, H., & Meliala, A. (2018). Identification of the Biofilm Producing Capacity and the Sensitivity Pattern to Various Antibiotics of *Klebsiella pneumoniae* Isolated from Blood Samples in Rumah Sakit Soeradji Tirtonegoro Klaten.
- Pinto, M., Borges, V., Nascimento, M., Martins, F., Pessanha, M.A., Faria, I., *et al.* (2022). Insights on catheter-related bloodstream infections: a prospective observational study on the catheter colonization and multidrug resistance. *J. Hosp. Infect.* 123 : 43–51.
- Pitout, J.D.D., & Laupland, K.B. (2008). Enterobacteriaceae : an emerging public-health concern 8 : 159–166.
- Póvoa, P., Coelho, L., Dal-Pizzol, F., Ferrer, R., Huttner, A., Conway Morris, A., *et al.* (2023). How to use biomarkers of infection or sepsis at the bedside: guide to clinicians. *Intensive Care Med.* 49 : 142–153.
- Purba, A.K.R., Mariana, N., Aliska, G., Wijaya, S.H., Wulandari, R.R., Hadi, U., *et al.* (2020). The burden and costs of sepsis and reimbursement of its treatment in a

- developing country: An observational study on focal infections in Indonesia. *Int. J. Infect. Dis.* 96 : 211–218.
- Purbaningsih, D., Nuryastuti, T., & Aman, A.T. (2023). Pola Kuman, Kepekaan Antibiotik dan Kemampuan Membentuk Biofilm Bakteri Patogen yang Diisolasi dari Pasien Pneumonia Pengguna Ventilator di Intensive Care Unit.
- Ramachandran, G. (2014). Gram-positive and gram-negative bacterial toxins in sepsis. *Landes Biosci.* 5 : 213–218.
- Ramos-Vivas, J., Chapartegui-González, I., Fernández-Martínez, M., González-Rico, C., Fortún, J., Escudero, R., *et al.* (2019). Biofilm formation by multidrug resistant Enterobacteriaceae strains isolated from solid organ transplant recipients. *Sci. Rep.* 9 : 1–10.
- Remick, D.G. (2007). Pathophysiology of sepsis. *Am. J. Pathol.* 170 : 1435–1444.
- Rhodes, K.A., & Schweizer, H.P. (2018). Antibiotic Resistance in Burkholderia Species Katherine. *Rev. del Col. Am. Cardiol.* 72 : 2964–2979.
- Rudd, K.E., Johnson, S.C., Agesa, K.M., Shackelford, K.A., Tsoi, D., Kievlan, D.R., *et al.* (2020). Global, regional, and national sepsis incidence and mortality, 1990–2017: analysis for the Global Burden of Disease Study. *Lancet* 395 : 200–211.
- Sakr, Y., Jaschinski, U., Wittebole, X., Szakmany, T., Lipman, J., Ñamendys-silva, S.A., *et al.* (2018). Sepsis in Intensive Care Unit Patients : Worldwide Data From the Intensive Care over Nations Audit 1–9.
- Santella, B., Folliero, V., Pirofalo, G.M., Serretiello, E., Zannella, C., Moccia, G., *et al.* (2020). Sepsis—A retrospective cohort study of bloodstream infections. *Antibiotics* 9 : 1–11.
- Şchiopu, P., Toc, D.A., Colosi, I.A., Costache, C., Ruospo, G., Berar, G., *et al.* (2023). An Overview of the Factors Involved in Biofilm Production by the Enterococcus Genus. *Int. J. Mol. Sci.* 24.
- Schuetz, P., Birkhahn, R., Sherwin, R., Jones, A.E., Singer, A., Kline, J.A., *et al.* (2017). Serial procalcitonin predicts mortality in severe sepsis patients: Results from the multicenter procalcitonin monitoring SEpsis (MOSES) Study. *Crit. Care Med.* 45 : 781–789.
- Sharma, S., Mohler, J., Mahajan, S.D., Schwartz, S.A., Bruggemann, L., & Aalinkeel, R. (2023). Microbial Biofilm: A Review on Formation, Infection, Antibiotic Resistance, Control Measures, and Innovative Treatment. *Microorganisms* 11 : 1–33.
- Silva, N.B.S., Marques, L.A., & Röder, D.D.B. (2021). Diagnosis of biofilm infections: current methods used, challenges and perspectives for the future. *J. Appl. Microbiol.* 131 : 2148–2160.

- Singer, M., Deutschman, C.S., Seymour, C.W., Shankar-Hari, M., Djillali Annane, MD, PhD, Michael Bauer, MD, Rinaldo Bellomo, MD, Gordon R. Bernard, MD, Jean-Daniel Chiche, MD, P., Craig M. Coopersmith, M., *et al.* (2016). Clinical implications of the third international consensus definitions for sepsis and septic shock (Sepsis-3). *Cmaj* 190 : E1058–E1059.
- Soedarmono, P., Diana, A., Tauran, P., Lokida, D., Aman, A.T., Alisjahbana, B., *et al.* (2022). The characteristics of bacteremia among patients with acute febrile illness requiring hospitalization in Indonesia. *PLoS One* 17 : 1–21.
- Strich, J.R., Heil, E.L., & Masur, H. (2021). Considerations for empiric antimicrobial therapy in sepsis and septic shock in an era of antimicrobial resistance. *J. Infect. Dis.* 222 : S119–S131.
- Tacconelli, E., Carrara, E., Savoldi, A., Harbarth, S., Mendelson, M., Monnet, D.L., *et al.* (2018). Discovery, research, and development of new antibiotics: the WHO priority list of antibiotic-resistant bacteria and tuberculosis. *Lancet Infect. Dis.* 18 : 318–327.
- Timsit, J.F., Ruppé, E., Barbier, F., Tabah, A., & Bassetti, M. (2020). Bloodstream infections in critically ill patients: an expert statement. *Intensive Care Med.* 46 : 266–284.
- Tong, S.Y.C., Davis, J.S., Eichenberger, E., Holland, T.L., & Fowler, V.G. (2015). *Staphylococcus aureus* Infections: Epidemiology, Pathophysiology, Clinical Manifestations, and Management 28 : 603–661.
- Toyyibah, I.D., Rusli, M., & Juniastuti, J. (2022). Bacterial Pattern Among Sepsis Patients in Internal Medicine Inpatient Ward Dr. Soetomo General Academic Hospital, Surabaya, Indonesia in 2017-2019. *Maj. Biomorfologi* 32 : 52–58.
- Uruén, C., Chopo-Escuin, G., Tommassen, J., Mainar-Jaime, R.C., & Arenas, J. (2021). Biofilms as promoters of bacterial antibiotic resistance and tolerance. *Antibiotics* 10 : 1–36.
- Via, L. La, Sangiorgio, G., Stefani, S., Marino, A., Nunnari, G., Cocuzza, S., *et al.* (2024). The Global Burden of Sepsis and Septic Shock 456–478.
- Vincent, J.L., Rello, J., Marshall, J., Silva, E., Anzueto, A., Martin, C.D., *et al.* (2009). International study of the prevalence and outcomes of infection in intensive care units. *Jama* 302 : 2323–2329.
- Wanrooij, V.H.M., Cobussen, M., Stoffers, J., Buijs, J., Bergmans, D.C.J.J., Zelis, N., *et al.* (2023). Sex differences in clinical presentation and mortality in emergency department patients with sepsis. *Ann. Med.* 55.
- Yang, S., Li, X., Cang, W., Mu, D., Ji, S., An, Y., *et al.* (2023). Biofilm tolerance, resistance and infections increasing threat of public health. *Microb. Cell* 10 : 233–247.

- Yapson, G.Y.A. (2023). Pola Kepekaan Bakteri *Acinetobacter Baumannii* Terhadap Beberapa Antibiotik Pada Pasien Rawat Inap Di Rsup Prof. Dr. I.G.N.G Ngoerah Denpasar Tahun 2021. *E-Jurnal Med. Udayana* 12 : 37.
- Yende, S., Alvarez, K., Loehr, L., Folsom, A.R., Newman, A.B., Weissfeld, L.A., *et al.* (2013). Epidemiology and long-term clinical and biologic risk factors for pneumonia in community-dwelling older Americans analysis of three cohorts. *Chest* 144 : 1008–1017.
- Zhao, A., Sun, J., & Liu, Y. (2023). Understanding bacterial biofilms: From definition to treatment strategies. *Front. Cell. Infect. Microbiol.* 13 : 1–23.
- Zheng, C., Zhang, S., Chen, Q., Zhong, L., Huang, T., Zhang, X., *et al.* (2020). Clinical characteristics and risk factors of polymicrobial *Staphylococcus aureus* bloodstream infections. *Antimicrob. Resist. Infect. Control* 9 : 1–11.