

## DAFTAR PUSTAKA

1. Nelwan RHH. Buku ajar ilmu penyakit dalam jilid III. Dalam: Sudoyo AW, Setiyohadi B, Alwi I, Simadibrata K, Setiati S, editors. Pemakaian antimikroba secara rasional di klinik. Edisi IV. Jakarta: Departemen Ilmu Penyakit Dalam FK UI; 2007.
2. Lullmann H, Mohr K, Ziegler A, Bieger D. Color atlas of pharmacology. Edisi 2. New York: Thieme Stuttgart; 2000.
3. Brunton LL, John SL, Keith LP. Goodman and Gilman's manual of pharmacology and therapeutics. New York: Mc Graw-Hill Companies Inc; 2008.
4. Leekha S, Terrell CL, Edson RS. General principles of antimicrobial therapy. *Mayo Clin Proc.* 2011;86(2):156-167.
5. Klein EY, Boeckel TPV, Martinez EM, Pant S, Gandra S, Levin SA, et al. Global increase and geographic convergence in antibiotic consumption between 2000 and 2015. 2018;115:3462-3470.
6. Nepal G, Bhatta S. Self-medication with Antibiotics in WHO Southeast Asian Region: A Systematic Review. 2018;10(4):1-17.
7. Zellweger RM, Mas JC, Limmathurotsakul D, Day NPJ, Thwaites GE, Baker S. A current perspective on antimicrobial resistance in Southeast Asia. *J Antimicrob Chemother.* 2017;72:2963-2972.
8. Lestari PD, Utami ED, Suryoputri MW. Evaluasi penggunaan antibiotik di ruang rawat inap dewasa RSUD Prof. Dr. Margono Soekarjo Purwokerto periode Oktober-Desember 2017. 2018;6(1):20-8.
9. Hidayati, Arifin H, Raveinal. Kajian penggunaan antibiotik pada pasien sepsis dengan gangguan ginjal. *Jurnal sains farmasi & klinis.* 2016;2(2):129-37.
10. Yagoub U, AlQahtani B, Aihariri I, Alzahrani A, Siddique K. Antibiotic resistance: a hospital-based multicenter study in Tabuk city, Kingdom of Saudi Arabia. *Infection and Drug Resistance.* 2019;12:1815-1825.
11. Allcock S, Young EH, Holmes M, Gurdasani D, Dougan G, Sandhu MS, et al. Antimicrobial resistance in human populations: challenges and opportunities. 2017; 2(4):1-7.
12. Verma AA, Guo Y, Kwan JL, Shaw LL, Rawal S, Tang T, et al. Prevalence and costs of discharge diagnoses in inpatient general internal medicine: a multi-center cross-sectional study. *J Gen Intern Med.* 2018;33(11):1899-1904.
13. Roger D, Runolfur P, Lenka B, Lorenzo D, Mine DT, Moshe V. Common diagnoses in internal medicine in Europe 2009: A pan-European, multi-centre survey. *Eur J Int Med.* 2010;21:449-452.
14. Muller A, Monnet DL, Talon D, Henon T, Bertrand X. Discrepancies between prescribed daily doses and WHO defined daily doses of antibacterials at a university hospital. *Br J Clin Pharmacol.* 2006 May;61(5):585-91.

15. Filius PMG, Liem TBY, van der Linden PD, Janknegt R, Natsch S, Vulto AG, et al. An additional measure for quantifying antibiotic use in hospitals. *J Antimicrob Chemother.* 2005 May;55(5):805–8.
16. Stiabudy R, Gan VHS. *Farmakologi dan terapi.* Edisi 4. Dalam: Ganiswara SG, Setiabudy R, Suyatna FD, Purnawantastuti, Nafrialdi. *Antimikroba.* Edisi 4. Jakarta: Gaya baru; 2001.
17. Levison ME, Levison JH. Pharmacokinetics and pharmacodynamics of antibacterial agents. *Infect Dis Clin North Am.* 2009;23(4):1-29.
18. Harvey RA, Champe PC. *Pharmacology.* Ed 2. Philadelphia: Lippincott William & Wilkins; 2000.
19. Mueller M, Pena ADL, Derendorf H. Issues in pharmacokinetics and pharmacodynamics of anti-infective agents: kill curves versus MIC. *Antimicrob Agents Chemother.* 2004;48(2):369-377.
20. Etebu E, Arikekpar I. Antibiotics: classification and mechanisms of action with emphasis on molecular perspectives. *Int. J. Appl. Microbiol. Biotechnol. Res.* 2016:90-101.
21. Vanhoek AHAM, Mevius D, Guerra B, Mullany P, Roberts AP, Aarts HJM. Acquired antibiotic resistance genes: an overview. *Front Microbiol.* 2011;2:1-27.
22. Tortora GJ, Funke BR, Case CL. *Microbiology an introduction.* 11<sup>th</sup> ed. United State: Pearson Education; 2013.
23. Wallace KMP, Endimiani A, Taracila MA, Bonomo RA. Carbapenems: past, present, and future. *Antimicrob Agents Chemother.* 2011;55(11):4943-4960.
24. George DP. The macrolide antibiotic renaissance. *Br J Pharmacol.* 2017;174:2967-2983.
25. Kanoh S, Rubin BK. Mechanisms of action and clinical application of macrolides as immunomodulatory medications. *Antimicrob Agents Chemother.* 2010;23(3):590-615.
26. Fuoco D. Classification framework and chemical biology of tetracycline-structure-based drugs. 2012;1:1-13.
27. Roberts M, Chopra I. Tetracycline antibiotics: mode of action, applications, molecular biology, and epidemiology of bacterial resistance. *Microbiol Mol Biol Rev.* 2001;65(2):232-260.
28. Katzung B.G, Masters S.B, Trevor A.J. *Farmokologi dasar dan klinik.* Edisi XIII. Jakarta: EGC; 2013.
29. Mobahshery S, Vakulenkot SB. Versatility of aminoglycosides and prospects for their future. *Clin Microbio Rev.* 2003;16(30):430-450.
30. Park Y, Kang HK. Glycopeptide antibiotics: structure and mechanisms of action. 2015;45(2):67-78.
31. Dinos GP, Athanassopoulos GM, Missiri DA, Giannopoulou PC,

- Vlachogiannis JA, Papadopoulos GE, et al. Chloramphenicol derivatives as antibacterial and anticancer agents: historic problems and current solutions. 2016;5(20):1-21.
32. NIH. Uniyed State National Library of Medicine. Compound Summary of Chloramphenicol. <https://pubchem.ncbi.nlm.nih.gov/compound/Chloramphenicol> - Diakses November 2019.
  33. Permenkes nomor 2406/Menkes/Per/XII/2011. Tentang pedoman umum penggunaan antibiotik. Jakarta; Kementerian Kesehatan Republik Indonesia: 2011.
  34. Lafontaine DLJ, Tollervey D. The function and synthesis of ribosomes. 2001;2:1-514-520.
  35. Aldred KJ, Kerns RJ, Osherof N. Mechanism of quinolone action and resistance. American Chemical Society. 2014;53:1565-1574.
  36. Levine C, Hiasa H, Marians KJ. DNA gyrase and topoisomerase IV: biochemical activities, physiological roles during chromosome replication, and drug sensitivities. Biochim Biophys Acta. 1998;1400:29-43.
  37. Marians KJ, Peng H. Decatenation activity of topoisomerase IV during oriC and pBR322 DNA replication in vitro. Proc Natl Acad Sci. 1993;90:8571-5.
  38. Leclerc QJ, Naylor NR, Aiken AM, Coll F, Knight GM. Feasibility of informing syndrome-level empiric antibiotic recommendations using publicly available antibiotic resistance datasets. 2019;4(140):1-18.
  39. Public Health Ontario. Antimicrobial Stewardship Strategy: Empiric antibiotic prescribing guidelines. 2016.
  40. Thompson RL, Wright AJ. General principles of antimicrobial therapy. Mayo Clin Proc. 1998;73:995-1006.
  41. American Association of Endocarditis. Antibiotic prophylaxis 2017 update. Chicago: Elsevier; 2017.
  42. World Health Organisation. Guidelines for ATC classification and DDD assignment 2019. Norway: Norwegian Institute of Public Health; 2018.
  43. World Health Organisation. WHO report on surveillance of antibiotic consumption. Switzerland: 2018.
  44. Oktaviana MN. Analisa kualitatif pada penggunaan antibiotik. Fatmawati Hospital Journal. 2016;1:1-5.
  45. World Health Organisation. Step-by-step approach for development and implementation of hospital antibiotic policy and standard treatment guidelines. India: 2011.
  46. Vandermerr JWM, Gyssen. Quality of antimicrobial drug prescription in hospital. Clin Microbiol Infect. 2001;7(6):12-5.
  47. Cunha BA. Antibiotic side effect. Med Clin North Am. 2001;85(1):149-185.

48. Chandel NS, Budinger GRS. The good and the bad of antibiotics. *Sci Transl Med.* 2013;5(192):1-5.
49. Dancer SJ. How antibiotics can make us sick: the less obvious adverse effects of antimicrobial chemotherapy. *Lancet Infect Dis.* 2004;4:611–9.
50. Shuman M, Demlier TL, Trigoboff E, Opler LA. Hematologic impact of antibiotic administration on patients taking clozapine. *Innov Clin Neurosci.* 2012;9(11–12):18–30.
51. Lipsky BA, Baker CA. Fluoroquinolone toxicity profiles: a review focusing on newer agents. *Clin Infect Dis.* 1999;28:352-364.
52. Golkar Z, Bagasra O, Pace DG. Bacteriophage therapy: a potential solution for the antibiotic resistance crisis. *J Infect Dev Ctries* 2014; 8(2):129-136.
53. Haddadin RH, Alsous M, Wazaify M, Tahaineh L. Evaluation of antibiotic dispensing practice in community pharmacies in Jordan: a cross sectional study. *Plos One.* 2019;14(4):1-15.
54. Farley E, Stewart A, Davies MA, Govind M, Bergh D, Boyles TH. Antibiotic use and resistance: knowledge, attitudes and perceptions among primary care prescribers in South Africa. *S Afr Med J* 2018;108(9):763-771.
55. Gibert DN, Spellberg. The future of antibiotics and resistance: a tribute to a career of leadership by John Bartlett. *Clin Infect Dis.* 2014;59:71-5.
56. Paterson DL. The role of antimicrobial management programs in optimizing antibiotic prescribing within hospitals. *Clin Infect Dis.* 2006;42:90-5.
57. Bartlett JG, Gilbert DN, Spellberg B. Seven ways to preserve the miracle of antibiotics. *Clin Infect Dis.* 2013;56:1445-1450.
58. Permenkes nomor 8 tahun 2015. Tentang program pengendalian resistensi antimikroba di rumah sakit. Jakarta; Kementerian Kesehatan Republik Indonesia: 2011.
59. Yusuf S, Okuwa M, Irwan M, Rassa S, Laitung B, Thalib A, et al. Prevalence and risk factor of diabetic foot ulcers in a regional hospital, Eastern Indonesia. *Open Journal of Nursing.* 2016;6:1-10.
60. Edmond M, Foster A. The use of antibiotics in the diabetic foot. *Am J Surg.* 2004;187:25-8.
61. Chuan F, Tang K, Jiang P, Zhou B, He X. Reliability and validity of the perfusion, extent, depth, infection and sensation (PEDIS) classification system and score in patients with diabetic foot ulcer. *PlosOne.* 2015;10(4):1-9.
62. Bergman S, Shah PJ. Diabetic foot infections. *ACSAP.* 2016;7-26.
63. Banu A, Hassan MMN, Rajkumar J, Srinivasa S. Spectrum of bacteria associated with diabetic foot ulcer and biofilm formation: a prospective study. *AMJ.* 2015;8(9):280-5.

64. Kwon KT, Amstrong DG. Microbiology and antimicrobial therapy for diabetic foot infections. *Infect Chemother.* 2018;50(1):11-20.
65. Lipsky BA, Berendt AR, Cornia PB, Pile JC, Peters EJG, Armstrong DG, et al. 2012 Infectious diseases society of america clinical practice guideline for the diagnosis and treatment of diabetic foot infections. *Clin Infect Dis.* 2012;54(12):132–173.
66. Javier IU, Lew ASD, Lipsky BA. Diabetic foot infections: what have we learned in the last 30 years. *IJID.* 2015;1-50.
67. Ezebuonyi MC, Brakta F, Onor IO, Sarpong DF, Burks KB, Figueroa JE. Evaluation of physician prescribing patterns for antibiotics in the treatment of nonnecrotizing skin and soft tissue infections. 2018;43(5):287-292.
68. Santer M, Lalonde A, Francis NA, Smart P, Hooper J, Teasdale E, et al. Management of cellulitis: current practice and research questions. *BJGP.* 2018;68:595-6.
69. Raff AB, Kroshinsky D. Cellulitis a review. *JAMA.* 2016;16(3):325-337.
70. Almulhim AS, Alotaibi FM. Comparison of broad-spectrum antibiotics and narrow-spectrum antibiotics in the treatment of lower extremity cellulitis. *IJHS.* 2018;12(6):3-7.
71. Stevens DL, Bisno AL, Chambers HF, Dellinger EP, Goldstein EJC, Gorbach SL, et al. Practice guidelines for the diagnosis and management of skin and soft tissue infections: 2014 update by the infectious diseases society of america. *Clin Infect Dis.* 2014;59:10-52.
72. Odoki M, Aliero AA, Tibyangye J, Maniga JN, Wampande E, Charles CD, et al. Prevalence of bacterial urinary tract infections and associated factors among patients attending hospitals in Bushenyi District, Uganda. *Int J Microbiol.* 2019;2019:1-8.
73. Lee HS, Le Jennifer. Urinary tract infection in Infectious Diseases Pharmacotherapy self assesment program. 2018;1:7-28.
74. Mancini A, Pucciarelli S, Lombardi FE, Barocci S, Pauri P, Lodolini S. Differences between community-and hospital-acquired urinary tract infections in tertiary care hospital. *New Microbio.* 2019.
75. Holm A, Cordoba G, Aabenhus R. Prescription of antibiotics for urinary tract infection in general practice in Denmark. *Scand J Prim Health Care.*2019;37(1):83-9.
76. Isberg HK, Hedin K, Eva M, Molstad S, Beckman I A. Increased adherence to treatment guidelines in patients with urinary tract infection in primary care: A retrospective study. *Plos One.* 2019;14(3):1-12.
77. ATC (2018). Top 20 pneumonia fact. <https://www.thoracic.org/patients/patient-resources/resources/top-pneumonia-facts> - Diakses Oktober 2020.
78. Kementrian Kesehatan Republik Indonesia. Hasil utama riskesdas 2018. Jakarta: Badan Penelitian dan Pengembangan Kesehatan; 2018.

79. Micek ST, Kollef KE, Reichley RM, Roubinian N, Kollef MH. Health care-associated pneumonia and community-acquired pneumonia: a single-center experience. *Antimicrob Agents Chemother.* 2007;51(10):3568–3573.
80. Lee MS, Oh JY, Kang CI, Kim ES, Park S, Rhee CK, et al. Guideline for antibiotic use in adults with community-acquired pneumonia. *Infect Chemother.* 2018;50(2):160-198.
81. Mandell LA, Wunderink RG, Anzueto A, Bartlett JG, Campbell GD, Dean NC, et al. Infectious diseases society of america/american thoracic society consensus guidelines on the management of community-acquired pneumonia in adults. *Clin Infect Dis.* 2007;44:27-72.
82. Kalil AC, Metersky ML, Klompas M, Muscedere J, Sweeney DA, Palmer LB, et al. Management of adults with hospital-acquired and ventilator-associated pneumonia: 2016 clinical practice guidelines by the infectious diseases society of america and the american thoracic society. *Clin Infect Dis.* 2016;63:61-111.
83. Veeraraghavan B, Pragasam AK, Bakthavatchalam YD, Ralph R. Typhoid fever: issues in laboratory detection, treatment options & concerns in management in developing countries. *Future Sci OA.* 2018;4(06):1-12.
84. Punjabi NH, Agtini MD, Ochiai RL, Simanjuntak CH, Lesmana M, Subekti D, et al. Enteric fever burden in North Jakarta, Indonesia: a prospective, community based study. *J Infect Dev Ctries.* 2013; 7(11):781-787.
85. Thompson CN, Karkey A, Dongol S, Arjyal A, Wolbers M, Darton T, et al. Treatment response in enteric fever in an era of increasing antimicrobial resistance: an individual patient data analysis of 2092 participants enrolled into 4 randomized controlled trials in Nepal. *Clin Infect Dis.* 2017;64(11):1522-1531.
86. Zulfiqar A Bhutta ZA. Current concepts in the diagnosis and treatment of typhoid fever. *BMJ.* 2006;333:78–82.
87. Panduan penggunaan antibiotik. Program pengendalian resistensi antimikroba. RS Universitas Andalas. Padang: 2018.
88. Kusuma MA, Galistiani GF, Wijayanti DN, Umami Muzayanatul, Nurdiyanti, Ningrum WU, et al. Evaluasi Kuantitatif Penggunaan Antibiotik pada Pasien Caesarean Section di RSUD se-Kabupaten Banyumas. *JFI.* 2016;8(1):259-265.
89. American Lung Association. Trends in pneumonia and influenza morbidity and mortality. September 2008.
90. Naphali Kate, Koloski Natasha, Walker MM, Talley NJ. Women and functional dyspepsia. 2016;12(2):241-250.
91. Alamin Muhannad, Juniati Dwi. Klasifikasi Kelompok Umur Manusia Berdasarkan Analisis Dimensi Fraktal Box Counting Dari Citra Wajah Dengan Deteksi Tepi Canny. *Jurnal Ilmiah Matematika.* 2017;2(6):33-42.

92. Kemenkes RI. Gambaran Kesehatan Lanjut Usia di Indonesia Data dan Informasi Kesehatan. Kementerian Kesehatan Republik Indonesia.Jakarta. 2013.
93. Cilloniz Catia, Loeches IM, Vidal CG, Jose AS, Torres Antoni. Microbial Etiology of Pneumonia: Epidemiology, Diagnosis and Resistance Patterns. *Int. J. Mol. Sci.* 2016,:1-18.
94. Azmi Soraya, Aljunid SM, Maimaiti Namaitijiang, Ali AlAbed, Nur AM, Valera MD, et al. Assessing the burden of pneumonia using administrative data from Malaysia, Indonesia, and the Philippines. *Int J Infec Dis.* 2016;49:87-93.
95. Farida Helmia. Community-Acquired Pneumonia in Indonesia(thesis). Netherlands: Erasmus University Rotterdam;2015.
96. Khosravizadeh Omid, Vatankhah Soudabeh, Bastani Peivand, Kalhor Rohollah, Alirezaei Samira, Doosty Farzane. Factors affecting length of stay in teaching hospitals of a middle-income country. *Electronic Physician.* 2016;8(10):3042-3047.
97. Baek Hyunyoung, Cho Minsu, Kim Seok, Hwang Hee, Song Minseok, Yoo Sooyoung. Analysis of length of hospital stay using electronic health records: A statistical and data mining approach. *Plos One.* 2018:1-18.
98. Barisonzo Riccardo, Wiedermann Wolfgang, Unterhuber Matthias, Wiedermann CJ. Length of stay as risk factor for inappropriate hospital days: interaction with patient age and co-morbidity. *Journal of Evaluation in Clinical Practice.* 2013;19:80–85.
99. Rodriguez MD, Cavanillas AB, Gigosos RL, Castillo DL, Solvass JG, Abril OM, et al. Hospital Stay Length As An Effect Mdfier Of Other Risk Factors For Nosocomial Infection. *Eur. J. Epidemiol.* 1990;6(1):34-39.
100. Heningtyas SAP, Hendriani Rini. Evaluasi Penggunaan Antibiotik Pada Pasien Rawat Inap Di Rumah Sakit X Prvinsi Jawa Barat Secara Kuantitatif Pada Bulan November-Desember 2017. *Farmaka.* 2018;16(2):97-104.
101. Tamura K. Initial Empirical Antimicrobial Therapy: Duration and Subsequent Modifications. *Clin Infec Dis.* 2004;39:59-64.
102. Pradipta IS, Ronasih E, Kartikawati AD, Hartanto H, Amelia R, Febrina E, et al. Three years of antibacterial consumption in Indonesian Community Health Centers: The application of anatomical therapeutic chemical/defined daily doses and drug utilization 90% method to monitor antibacterial use. *J Fam Community Med.* 2015;22:101-5.
103. Astuti Diany, Arfania Maya. Analisis Penggunaan Antibiotik Dengan Metode ATC/DDD Di Rumah Sakit Swasta Kab Karawang.2018:194-202.
104. Sari Andriana, Safitri Indah. Studi Penggunaan Antibiotika Pasien Pneumonia Anak di RS PKU Muhammadiyah Yogyakarta Dengan Metode Defined Daily Dose (DDD). *Jurnal Ilmiah Ibnu Sina.* 2016;1(2):151-16.
105. Mahmudah Febrina, Sumiwi SA, Hartini Sri. Studi Penggunaan Antibiotik

- Berdasarkan ATC/DDD dan DU 90% di Bagian Bedah Digestif di Salah Satu Rumah Sakit di Bandung. *Jurnal Farmasi Klinik Indonesia*. 2016;5(4):293–298.
106. Sözen Hamdi, Gönen İbak, Sözen Ayşe, Kutlucan Ali, Kalemci Serdar, Sahan Murat. Application of ATC/DDD methodology to evaluate of antibiotic use in a general hospital in Turkey. *Annals of Clinical Microbiology and Antimicrobials*. 2013;12(23):1-6.
107. Thai T, Salisbury BH, Zito PM. Ciprofloxacin. In: StatPearls Publishing; 2020 Jan.
108. Conley ZC, Bodine TJ, Chou A, Zechiedrich L. Wicked: The untold story of ciprofloxacin. *PLoS Pathog*. 2018;14(3):1-13.
109. Hause AR. *Antibiotic Basic for Clinicians: The ABCs of Choosing The Right Antibacteria Agent Second Edition*. Philadelphia: Lippincott Williams & Wilkins Inc; 2013.
110. Scholssberg David, Samuel Rafik. *Antibiotics Manual: A Guide to Commonly Used Antimicrobials Second Edition*. USA: John Wiley & Sons Inc; 2011.
111. Kartika NTM, Lestari ES, Farida Helmia, Ciptaningtyas VR. Kualitas Dan Kuantitas Penggunaan Antibiotik Pada Kasus Penyakit Dalam Sebelum Dan Setelah Penyuluhan PPRA Di Rumah Sakit Nasional Diponegoro. *Jurnal Kedokteran Diponegoro*. 2019;8(4):1306-1318.
112. Ozkurt Z, Erol S, Kadanali A, Ertek M, Ozden K, Tasyaran MA. Changes In Antibiotic Use, Cost And Consumption After An Antibiotic Restriction Policy Applied By Infectious Disease Specialist. *Jpn J Infect*. 2005;58(6):338-343.
113. Gyssens IC. Antibiotic policy. *Int J Antimicrob Agents*. 2011;38:11-20.

