

DAFTAR PUSTAKA

- Agustina, 2009. *Penggunaan Antimikroba Secara Bijak Untuk Meminimalkan Resistensi Penggunaan Antimikroba*. Instalasi Farmasi RS Dr. Soetomo, Surabaya.
- Andes, D.R., Craig W.A., 2009. Cephalosporins. In: Mandell GL, Bennett JE, Dolin R, Eds. *Principles and Practice of Infectious Diseases*. 7th ed. Philadelphia, PA: Churchill, Livingstone, Elsevier. p347-354.
- Anonim, 2007. E-Test For In Vitro Confirmation of ESBL., *Downloaded from* <http://www.abbiotest.com> tanggal 26 Mei 2015.
- Anthony, J.V., Joanne, M.G., 2005. Understanding Interobserver Agreement: The Kappa Statistic., *Fam Med*, 37(5): 360-363.
- Ataee, R.A., Tavana, A.M., Hoseini, S.M.J, Moridi, K., Zadegan, M.G.A., 2002, Method for Antibiotic Susceptibility Testing: Applicable and Accurate. *Jundishapur J. Microbiol.*, 5(1): 341-345.
- Bali, E.B., Acik L., Sultan, N., 2010., Phenotypic and molecular characterization of SHV, TEM, CTX-M and extended-spectrum lactamase produced by *Escherichia coli*, *Acinobacter baumannii* and *Klebsiella* isolates in a Turkish hospital., *Afr. J. Microbiol. Res.* Vol. 4 (8), pp. 650-654.
- Barbosa, T.M., Levy, S.B., 2000. The Impact of Antibiotic use on Resistance Development and Persistence. *J. Drug Res. Updates*; 3:303-311
- Basak, S., Rahurkar, M.N., 2014. Newer β -lactamases and *E. coli* – A cause of concern. Dalam: Sudhakar, C., (ed), *Infection control updates*. Intech, Rijeka., 47-72.
- Basu, A., Arumugam, U., Rao, N., 2014. Detection of extended-spectrum β -lactamases in members of family *Enterobacteriaceae*: Comparison of the combination double disk test method and the Etest ESBL. *IQSR J. App. Den. Med. Sci.* 13 (2): 58-63.
- CLSI, 2014. *Performance Standards for Antimicrobial Susceptibility Testing*; Eighteenth Informational Supplement. M100-S18., 28.(1), Replaces M-100-S17., 27(1).
- Cockerill, F.R., 2011. Performance Standards for Antimicrobial Susceptibility Testing. *CLSI Twenty-first Informational Supplement*. 31 (1), M100-S21.
- Craig, W.A., Interrelationship between pharmacokinetics and pharmacodynamics in determining dosage regimens for broad spectrum cephalosporins. *Diagn. Microbiol. Infect. Dis.* 1995;21:1-8.
- Davies, J., Davies, D., 2010., Origins and Evolution of Antibiotic Resistance. *microbiology and molecular biology reviews*, Vol 74(3) p. 417–433.
- Direux, L., Brossier, F., Sougakoff, W., Jarlier, V., 2008. Phenotypic detection of extended-spectrum β -lactamase production in *Enterobacteriaceae*: review and bench guide. *Clin. Microbiol. Infect.* 14 (S1): 90-103.
- Engelkirk, P.G, Duben-Engelkirk, J., 2008. Antimicrobial agents and antimicrobial susceptibility testing. In *Laboratory Diagnosis of Infectious Diseases: Essentials of Diagnostic Microbiology*, p153-184. Lippincott Williams & Wilkins, a Wolters Kluwer business: Philadelphia.

- Erfani, Y., Rasti, A., Mirsalehian, A., Mirafshar, S.M., Ownegh, V., 2011. E-test versus disk diffusion method in determining multidrug resistant strains of *Escherichia coli* in urinary tract infection., *Afr. J. Microbiol. Res.*, 5(6): 608-611.
- EUCAST, 2014. *Reading guide EUCAST disk diffusion method for antimicrobial susceptibility testing*. Version 2.0. Diunduh dari www.eucast.org tanggal 15 September 2015.
- Farmer, J.J., Boatwright, K.D., Micheal, J., 2007. *Enterobacteriaceae: Introduction and Identification*, p. 649-669. In P.R. Murray, Baron, E. J., Jorgensen, J.H., Tenover, M.C., Tenover, R. H. (ed.), *Manual of Clinical Microbiology*, 9th ed, vol. 1. ASM Press, Washington, D.C.
- Gabridge, M., 2014, *Escherichia Coli Bacteria Colonies on MacConkey Agar*. Diunduh dari www.alposters.com tanggal 24 November 2015.
- Ganiswarna, S.G., Setabudy, R., Suyatna, F.D., Purwastyastuti., Nafrialdy, 2002. *Farmakologi dan Terapi*. Gaya Baru: Jakarta.
- Giske, C.G., Martinez, L.M., Canton, R., Stefani, A., Skov, R., Glupczynski, Y., 2012. *EUCAST guidelines for detection of resistance mechanisms and specific resistances of clinical and/or epidemiological importance*. European Committee on Antimicrobial Susceptibility Testing. Diunduh dari www.eucast.org tanggal 1 Oktober 2015.
- Grover, C., Sahni, A.K., Bhattacharya, C.S., 2012. Therapeutic challenges of ESBLs and AmpC beta-lactamase producers in a tertiary care center. *Med. J. Armed Forces India* 69 (1): 4-10.
- Gupta, A., Ampofo, K., Rubenstein, D., Saiman, L., 2003. Extended spectrum β lactamase-producing *Klebsiella pneumoniae* infections: a review of the literature. *J. Perinatol.* 23: 439-443.
- Irawan D., Hamidah, Purwati, Triyono EA, Bramantono, Aranto V, Hadi U, Nasronudin, Suharto, Soewandojo, E., 2012 ., Profil Penderita Sepsis Akibat Bakteri Penghasilpenderita Sepsis Akibat Bakteri Penghasil ESBL., *J. Peny Dalam*, Volume 13 (1) p.63-68.
- Jawetz E.J.L., Melnick, E. A., Adelberg, G. F., Brooks, J. S., Butel, L. N., Ornston, 2013, *Bacteriology; Pathogenesis of bacterial infection. Mikrobiologi Kedokteran*, ed. 20, University of California, San Francisco. 238-240.
- Jones, R.N., Craig, W.A., Ambrose, P.G., Dudley, M.N., Pottumarthy, S., 2005., Reevaluation of Enterobacteriaceae MIC/disk diffusion zone diameter regression scattergrams for 9 h-lactams: adjustments of breakpoints for strains producing extended spectrum h-lactamases. *Diagn. Microb. Infect. Dis.* 52 (2005):235-246.
- Jorgensen, J.H., Ferraro, M.J., 2009. Antimicrobial Susceptibility Testing: A Review of General Principles and Contemporary Practices, *J. Clin. Inf. Dis.*, (49):1749-1755.
- Karowsky, J.A., Kelly, C., Thornsberry, M.E., Jones, D.F., Sahm, 2010. Trends in Antimicrobial Resistance among Urinary Tract Infection Isolates of *Escherichia coli* from Female Outpatient in the United States, *Antimicrob. Agents Chemother.*, 46(8): 2540-2545

- Katzung, Bertram, G, 2010. Obat kemoterapeutik, Antibiotik beta laktam dan antibiotik lain yang aktif di dinding membran sel. *Farmakologi Dasar dan Klinik*. Edisi 10. EGC, Jakarta. 747-767.
- Kocic, B., Mladenovic-Antic, S., 2013. A comparison of Neo-SensitabsTM tablets and paper discs in disc diffusion antimicrobial susceptibility testing. *Afr.J. Microbiol. Res.* 7(29): 3740-3749.
- Konalieva, M.I., 2014., Molecular Targets of β -Lactam-Based Antimicrobials: Beyond the Usual Suspects ., *J. Antibiotics* .3(1)., 128-142.
- Krisher, K. K., Linscott, A. 1994. Comparison of three commercial MIC systems, E test, fastidious antimicrobial susceptibility panel, and FOX fastidious panel, for confirmation of penicillin and cephalosporin resistance in *Streptococcus pneumoniae*. *J. Clin. Microbiol.* 32:2242-2245
- Kuntaman, K., Santoso, S., Wahjono, H., Mertaniasih, N.M., Lestari, E.S., Farida, H., Hapsari, R., Firmanti, S.C., Noorhamdani, A.S., Santosaningsih,, Purwono, P.B., Kusumaningrum, D., 2011. The Sensitivity Pattern of Extended Spectrum Beta Lactamase Producing Bacteria Against Six Antibiotics that Routinely Used in Clinical Setting., *J. Indon. Med. Assoc.*, 61(12): 482-486.
- Kusuma, S.A., 2010. *Uji Biokimia Bakteri*. Pustaka Unpad., Universitas Padjajaran, Bandung.
- Lakshmi, R., Nusrin, K.S., Ann, G.A., Sreelakshmi, K.S., 2014. Role of beta lactamases in antimikrobia resistance : A review. *Int.Res.J.Pharm.* 5 (2): 37-40.
- Lalitha, M.K., 2004., *Manual on Antimicrobial Susceptibility Testing*. Department of Microbiology Christian Medical college Velore, Tamil Nadu.
- Lowman, W., Aithma, N., Coetzee, J.F., Duse, A.G., Mervyn, M., 2012. Comparative MIC evaluation of a generic ceftriaxone by broth microdilution on clinically relevant isolates from an academic hospital complex in South Africa. *S. Afr. Med. J.* 102(2):101-103.
- Medeiros, A.A., 1997. Evolution and dissemination of β -lactamases accelerated by generations of β -lactam antibiotics. *Clin. Inf.Dis.* 24(1):19-45.
- Mnoharan, A., Pai, R., Shankar, V., Thomas, K., Lalitha, M.K., 2003. Comparison of disk diffusion and E-test methods with agar dilution for antimicrobial susceptibility testing of *Haemophilus influenza*. *Indian J. Med. Res.*, 117: 81-87.
- Noorhamdani, Roekistiningsih, Winarsih, S., Islam, S., Sumarno. 2010. Infeksi saluran kemih pola kuman isolat hasil biakan urin dan pola resistensinya terhadap antimikrobia di RSUD Dr. Saiful Anwar Malang tahun 2010. *Majalah Kedokteran Unibraw XII*(1): 13-16.
- Paterson, D.L., Chien, Ko.W., Gottberg, A.V., Mohapatra, S., Casellas, J.M., Goossens, H., 2009. Antibiotic therapy for *Klebsiella pneumoniae* bacteremia: Implications of production of extended-spectrum β -lactamase. *Clin. Inf. Dis.* 39 (1): 31-37.
- Paterson, D.L., Banomo, R.A., 2015., Extended spektrum beta lactamase : clinical update. *J.Microbiol.*, 18(4):657-686.

- Platteel, T.N., Stuart, J.W.C., de Neeling, A.J, Voets, G.M., Scharringa, J., Van de Sande, J., Fluit, A.C., Bonten, M.J.M., Leverstein-van Hall, M.A., 2013. Multi-centre evaluation of a phenotypic extended spectrum β -lactamase detection guideline in the routine setting, *Clin. Microbiol. Infect.*, 19: 70-76.
- Priyanto, 2008. *Farmakoterapi dan Terminologi Medis*. Lembaga Studi dan Konsultasi Farmakologi (Leskonfi) Kesehatan, Bandung., 129-130.
- Rupp, M.E, Fey, P.D., 2003. Extended Spektrum β -Lactamase (ESBL) – Producing *Enterobacteriaceae*, Considerations for Diagnosis, Prevention and Drug Treatment. *Drugs*: 63 (4); 353-365.
- Saepudin., Pajariu, 2007. Perbedaan Penggunaan Antimikrobiaa pada pengobatan pasien infeksi saluran kemih yang menjalani rawat inap di salah satu RSUD di Yogyakarta: *Media Medika Indonesia*. Fakultas Kedokteran Universitas Diponegoro. 260 –2 67.
- Saharman,Y.R., Lestari,D.C., 2011. Phenotype Characterization of Beta-Lactamase Producing *Enterobacteriaceae* in the Intensive Care Unit (ICU) of Cipto Mangunkusumo Hospital in 2011. *Acta Medica Indonesiana- The Indonesian Journal of Internal Medicine(IIJM)*, 45(1):11-16.
- Sahin I., Sencan I., Kaya S., Okzus S., Gulcan A., 2003., Evaluation of direct and standard antimicrobial susceptibility testing methods on some bacteria isolated from automated blood cultures. *Ünfeksiyon Dergisi (Turkish Journal of Infection)* vol. 17 (3): 301-306
- Sánchez, M.A., Sánchez del Saz, B., Loza, E., Baquero, F., Cantón, R., 2001. Evaluation of the OSIRIS video reader system for disk diffusion susceptibility test reading. *Clin. Microbiol. Infect.*, 7(7):352-357.
- Sastroasmoro, S., 2008, Pemilihan Subyek Penelitian. Dalam: Sastroasmoro, S., Dasar-dasar Metodologi Penelitian Klinis, Sagung Seto, Jakarta, 67-76.
- Schwalbe, R., Steele-Moore, L., Goowin, A.C., 2007. *Antimicrobial Susceptibility Testing Protocols*, CRC Press; 85-87
- Skulnick, M., Glen W. Small, Donald E. Low, Pauline L.O., Matsumura S., Mohan, P., Patel., Craig, R., Poter., Mazzully T., 1995., Evaluation of Accuracy and Reproducibility of E test for Susceptibility Testing of *Streptococcus pneumoniae* to Penicillin, Cefotaxime, and Ceftriaxone., *J.Clin. Microbiol.*, vol.33(9) p. 2334-2337.
- Sotelo, T., Westney, L., 2003. Recurent urinary tract infectionin women. *Curr. Women's Health Rep.*, 3:313-318.
- Stefaniuk, E., Mrowka. A., Hryniewicz., 2005. Susceptibility testing and resistance phenotipic in bacterial pathogens using the VITEK 2 System. *Polish Journal of Microbiology*. 54(4) 311-316.
- Steven, M., 2011. Antibiotics usage and resistance. *J.Am.Med. Assoc.*, 302(21):2367-2368.
- Stokkou, S., Geginat G., Schlüter D., Tammer I., 2015., Direct disk diffusion test using european clinical antimicrobial susceptibility testing breakpoints provides reliable results compared with the standard method., *Eur.J. Microbiol.Immunol.*5 (1), pp. 103–111

- Sundqvist, M., Littauer, P., Visser, C., Hodiamont, C., Dahl, K., Kahlmeter, G., 2013. *Disk diffusion using EUCAST methodology can be interpreted after 6 or 8 hours incubation*, Poster 1541, ECCMID.
- Taneja, N., Sharma, M., 2008. ESBLs Detection in Clinical Microbiology : Why & How ?. *Ind.Jour.Med. Res.*, 127: 297-300.
- Tumbarello, M., 2010. *Bloodstream Infections Caused by Extended-Spectrum-beta-Lactamase: Risk Factors, Molecular Epidemiology, and Clinical Outcome*. Diunduh dari <http://aac.asm.org/cgi/reprint/50/2/498> tanggal 28 Oktober 2015.
- Warganegara, E., Apriliana, E., 2014. The determinating type extended-spectrum β -lactamase enzyme (ESBL) from *Escherichia coli* resistance cephalosporine of third generation in RSUD Abdoel Moeloek Bandar Lampung. *JUKE*, 4 (7): 87-96.
- Winarto, 2009. Prevalensi kuman ESBL (*Extended spectrum beta lactamase*) dari material darah di RSUP Dr. Kariadi tahun 2004-2005. *MMI* 43 (5): 260-267.
- World Health Organization, 2001., *Antibiotic resistance: Synthesis of recommendation by expert policy groups-Alliance for the Prudent Use of Antibiotics*. WHO Press, Geneva.