

## DAFTAR PUSTAKA

- Augustyn, B. (2007). *Ventilator Associated Pneumonia: Risk and Prevention*. Critical Care Nurse, American Association of Critical Care Nurses. Columbia.
- Beckmann, U., Gillies, D.M., (2001). Factors Associated With Reintubation in Intensive Care. *Chest* 120, 538–542. <https://doi.org/10.1378/chest.120.2.538>
- Blot, S., Koulenti, D., Dimopoulos, G., Martin, C., Komnos, A., Krueger, W. A., Spina, G., Armaganidis, A., & Rello, J. (2014). Prevalence, risk factors, and mortality for ventilator-Associated pneumonia in middle-Aged, Old, and very old critically ill patients. *Critical Care Medicine*, 42(3), 601–609. <https://doi.org/10.1097/01.ccm.0000435665.07446.50>
- Brotfain, E., Borer, A., Koyfman, L., Saidel-Odes, L., Frenkel, A., & Gruenbaum, S. et al. (2016). Multidrug Resistance Acinetobacter Bacteremia Secondary to Ventilator-Associated Pneumonia: Risk Factors and Outcome. *Journal Of Intensive Care Medicine*, 32(9), 528-534. <https://doi.org/10.1177/0885066616632193>
- Carson, S.S., (2007). Know Your Long-term Care Hospital. *Chest* 131, 2–5. <https://doi.org/10.1378/chest.06-2513>
- Cassini, A., Plachouras D., Eckmanns T., Abu Sin M., Blank HP., & Ducomble T. (2016). Burden of Six Healthcare-Associated Infections on European Population Health: Estimating Incidence-Based DisabilityAdjusted LIFE Years Through a Population Prevalence-Based Modelling Study. *PLoS Med*. Vol.13(10).
- CDC. (2003). *Guideline for preventing health care associated pneumonia*. Atlanta.
- CDC. (2011). *Pneumonia Can Be Prevented-Vaccines*. CDC. Available from: [www.cdc.gov/Features/Pneumonia](http://www.cdc.gov/Features/Pneumonia) [Accessed on 16 Juli 2022]
- CDC. (2014). Ventilator-Associated Pneumonia (VAP) event. Centers for Disease Control and Preven Device Assoc Incidence, 6(1), 6-14. <http://www.cdc.gov/nhsn/pdfs/pscmanual/6pscvcapcurrent.pdf>.
- CDC. (2015). Pneumonia (Ventilator-Associated[VAP] and non-Ventilator Associated Pneumonia[Pneu]) Event. *Device-Associated Modul*.
- Charles, P. (2014). Ventilator-associated pneumonia. *Australian Medical Journal*. Doi: 10.4066/AMJ.2014.2105.
- Chastre, J. dan Luyt, C.E. (2007). Optimizing the duration of antibiotic therapy for ventilator-associated pneumonia. *European Respiratory Review*. 16, 40-44
- Chou, C., Wang, S., Liang, C., Chang, C., Liu, J., Wang, I., Hsiao, L., Muo, C., Huang, C., Wang, R. (2014). Risk of pneumonia among patients with chronic kidney disease in outpatient and inpatient settings. *Medicine*, 93(27)
- Cooper, M., Khan, S. (2012) ‘Chapter 50: Extubation and Reintubation of the Difficult Airway’ in Hagberg, C. (ed). *Benumof and Hagberg’s Airway Management*. Oxford: Elsevier Health Sciences
- Coppadoro, A., Bittner, E., & Berra, L. (2012). Novel preventive strategies for ventilator-associated pneumonia. *Critical Care*, 16(2), 210
- Departemen Kesehatan Republik Indonesia. (2009a). *Pedoman Pengendalian Penyakit Infeksi Saluran Pernafasan Akut, Direktorat Jendral Pengendalian Penyakit dan Penyehatan Lingkungan*. Jakarta: Departemen Kesehatan RI.
- Departemen Kesehatan Republik Indonesia. (2009b). *Pedoman Pemberantasan Penyakit Saluran Pernafasan Akut*. Jakarta: Departemen Kesehatan RI.

- Elmansoury, A., & Said, H. (2017). Closed suction system versus open suction. *Egyptian Journal Of Chest Diseases And Tuberculosis*, 66(3), 509-515. <https://doi.org/10.1016/j.ejcdt.2016.08.001>
- Elmer, J., Lee, S., Rittenberger, J.C., Dargin, J., Winger, D., Emlet, L. (2015). Reintubation in critically ill patients: Procedural complications and implications for care. *Critical care*, 19, 12
- Erbay, RH., Yalcin AN., Zenvir M., Serin S., & Atalay H. (2004). Cost and risk factors for ventilator-associated pneumonia in a turkish university hospital's intensive care unit: a case control study. *BMC Pulmonary Medicine*. Vol.4(3).
- Forel, J.-M., Voillet, F., Pulina, D., Gacouin, A., Perrin, G., Barrau, K., Jaber, S., Arnal, J.-M., Fathallah, M., Auquier, P., Roch, A., Azoulay, E., Papazian, L. (2012). Ventilator-associated pneumonia and ICU mortality in severe ARDS patients ventilated according to a lung-protective strategy. *Crit. Care* 16, R65. <https://doi.org/10.1186/cc11312>
- Gao, F., Yang, L., He, H., Ma, X., Lu, J., Zhai, Y., Guo, L., Wang, X., Zheng, J. (2016). The effect of reintubation on ventilator-associated pneumonia and mortality among mechanically ventilated patients with intubation: A systematic review and meta-analysis. *Heart & Lung*, 45, 363-371
- George, Y. (2009). Panduan Tata Kelola Hospital Acquired Pneumonia, Ventilator Associated Pneumonia dan Health Care Associated Pneumonia Pasien Dewasa, Perdici.
- Gould, D., Moralejo, D., Drey, N., Chudleigh, J., Taljaard, M., (2018). Interventions to improve hand hygiene compliance in patient care: Reflections on three systematic reviews for the Cochrane Collaboration 2007–2017. *J. Infect. Prev.* 19, 108–113. <https://doi.org/10.1177/1757177417751285>
- Hargreaves, D. S., Greaves, F., Levay, C., Mitchell, I., Koch, U., Esch, T., Denny, S., Frich, J. C., Struijs, J., & Sheikh, A. (2015). Comparison of health care experience and access between young and older adults in 11 high-income countries. *Journal of Adolescent Health*, 57(4), 413–420. <https://doi.org/10.1016/j.jadohealth.2015.05.015>
- Harsa, V. Patil & Virendra C. Patil. (2020). Incidence, Bacteriology, and Clinical Outcome of Ventilator-Associated Pneumonia at Tertiary Care Hospital. (<http://www.jnsbm.org> on Wednesday, April 29, 2020, IP: 202.43.95.39).
- Huang, K.-T., Tseng, C.-C., Fang, W.-F., Lin, M.-C., (2010). An Early Predictor of the Outcome of Patients with Ventilator-associated Pneumonia 33, 9.
- Ibn Saied, W., Mourvillier, B., Cohen, Y., Ruckly, S., Reignier, J., Marcotte, G., Siami, S., Bouadma, L., Darmon, M., de Montmollin, E., Argaud, L., Kallel, H., Garrouste-Orgeas, M., Soufir, L., Schwebel, C., Souweine, B., Glodgran-Toledano, D., Papazian, L., Timsit, J. F., & OUTCOMEREA Study Group (2019). A Comparison of the Mortality Risk Associated With Ventilator-Acquired Bacterial Pneumonia and Nonventilator ICU-Acquired Bacterial Pneumonia. *Critical care medicine*, 47(3), 345–352.
- Japanese Respiratory Society. (2009). Pneumonia in immunocompromised patients
- Joseph, N. M., Sistla, S., Dutta, T. K., Badhe, A. S., & Parija, S. C. (2009). Ventilator-associated pneumonia in a tertiary care hospital in India: incidence and risk factors. *Journal of infection in developing countries*, 3(10), 771–777. <https://doi.org/10.3855/jidc.396>
- Kalil, A.C., Metersky, M.L., Klompas, M., Muscedere, J., Sweeney, D.A., Palmer, L.B., Napolitano, L.M., O'Grady, N.P., Bartlett, J.G., Carratalà, J., El Solh, A.A., Ewig,

- S., Fey, P.D., File, T.M., Restrepo, M.I., Roberts, J.A., Waterer, G.W., Cruse, P., Knight, S.L., Brozek, J.L., 2016. 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. Off. Publ. Infect. Dis. Soc. Am.* 63, e61–e111. <https://doi.org/10.1093/cid/ciw353>
- Karatas, M., Saylan, S., Kostakoglu, U., Yilmaz, G. (2016). An assessment of ventilator-associated pneumonias and risk factors identified in the Intensive Care Unit. *Pakistan Journal of Medical Sciences*, 32(4).
- Karatas, M., Saylan, S., Kostakoglu, U., Yilmaz, G., (2016). Anassessment of ventilator-associated pneumonias and risk factors identified in the Intensive Care Unit. *Pak JMed Sci*. Vol.32(4). <http://dx.doi.org/10.12669/pjms.324.1038>.
- Kementrian Kesehatan RI. (2011). *Pedoman Umum Penggunaan Antibiotik*. Jakarta: Direktorat Jenderal Bina Kefarmasian dan Alat Kesehatan.
- Kementrian Kesehatan RI. (2016). *Pedoman Surveilans Infeksi*. Jakarta: Kemenkes RI.
- Kharel, S., Bist, A., & Mishra, S. K. (2021). Ventilator-associated pneumonia among ICU patients in WHO Southeast Asian region: A systematic review. *PLoS ONE*, 16(3 March). <https://doi.org/10.1371/JOURNAL.PONE.0247832>.
- Klompas, M., Li, L., Szumita, P., Kleinman, K., Murphy, M.V., (2016). Associations Between Different Sedatives and Ventilator-Associated Events, Length of Stay, and Mortality in Patients Who Were Mechanically Ventilated. *Chest* 149, 1373–1379. <https://doi.org/10.1378/chest.15-1389>
- Knaus, W. A., Draper, E. A., Wagner, D. P., & Zimmerman, J. E. (1985). APACHE II: a severity of disease classification system. *Critical care medicine*, 13(10), 818–829.
- Kooi, Van Der Hendriek B., Jan CW, Sabine C, Jaap T., Van Dissel, Annelot F. Schoffelen, Rolina D., & Van Gaalen. (2019). Using Flexible Methods to Determine Risk Factors for Ventilator-Associated Pneumonia in the Netherlands. *PLoS ONE*. Vol.14(6).
- Kornum, J.B., Thomsen, R.W., Rus, A., Lervang, H., Schonheyder, H.C., Sorensen, H.T. (2008). Diabetes, glycemic control, and risk of hospitalization with pneumonia. *Diabetes Care*. 31, 1541-1545
- Ladeira, M., Ribeiro Vital, F., Andriolo, R., Andriolo, B., Atallah, Á., & Peccin, M. (2014). Pressure support versus T-tube for weaning from mechanical ventilation in adults. *Cochrane Database Of Systematic Reviews*. <https://doi.org/10.1002/14651858.cd006056.pub2>
- Lahoorpour, F., Delpisheh, A., Afkhamzadeh, A., (2013). Risk factors for acquisition of ventilator-associated pneumonia in adult intensive care units. *Pak. J. Med. Sci.* 29, 1105–1107.
- Larsson, J., Itenov, T.S., Bestle, M.H., (2017). Risk prediction models for mortality in patients with ventilator-associated pneumonia: A systematic review and meta-analysis. *J. Crit. Care* 37, 112–118. <https://doi.org/10.1016/j.jcrc.2016.09.003>
- Luo, W., Xing, R., & Wang, C. (2021). The effect of ventilator-associated pneumonia on the prognosis of intensive care unit patients within 90 days and 180 days. *BMC Infectious Diseases*, 21(1). <https://doi.org/10.1186/s12879-021-06383-2>
- Mahapatra, A., Patro, S., Sarangi, G., Das, P., Mohapatra, D., Paty, B., et al. (2018). Bacteriological profile of ventilator-associated pneumonia in a tertiary care hospital. *Indian Journal of Pathology and Microbiology*. 61, 375-379
- Makris, D., Desrousseaux, B., Zakynthinos, E., Durocher, A., & Nseir, S. (2011). The impact of COPD on ICU mortality in patients with ventilator-associated

- pneumonia. Respiratory Medicine, 105(7), 1022-1029.  
<https://doi.org/10.1016/j.rmed.2011.03.001>
- Mandahadi, K.K. (2006). Faktor Risiko Kejadian Pneumonia Terkait ventilator (Ventilator-Associated Pneumonia) Pasca Pembedahan di ICU RS Dr. Sardjito Yogyakarta: Suatu Analisis Faktor Resiko. <https://repository.ugm.ac.id/70599/>.
- Mirsaedi, M., Peyrani, P., Ramirez, J.A., and IMPACT-HAP Investigators. (2009). Predicting mortality in patients with ventilator-associated pneumonia: The APACHE II score versus the new IBMP-10 score. *Infectious Disease of America*.
- Moreau, A., Martin-Loeches, I., Povea, P., Salluh, J., Rodriguez, A., Thille, A.W., Santos, E.D., Vedes, E., Lobo, S.M., Megarbane, B., Silvero, E.M., Coelho, L., Argaud, L., Iniesta, R.S., Labreuche, J., Rouze, A., Nseir, S. (2018). Impact of immunosuppression on incidence, aetiology and outcome of ventilator-associated lower respiratory tract infections. *European Respiratory Journal*, 51, 1701656
- Moultrie, D., Hawker, J., & Cole, S. (2011). Factors Associated with Multidrug-Resistant Acinetobacter Transmission: An Integrative Review of the Literature. *AORN Journal*, 94(1), 27-36. <https://doi.org/10.1016/j.aorn.2010.12.026>
- Munro, S.A., Lewin, S.A., Smith, H., Engel, M.E., Fretheim, A., & Volmink, J. (2006). Patient Compliance to tuberculosis treatment: A systematic review of qualitative research. *PLoS Medicine*. Vol 4(7):1230-1245.
- Naved, S., Siddiqui, S., & Khan, F. (2011). APACHE-II Score Correlation With Mortality And Length Of Stay In An Intensive Care Unit. *Journal of the College of Physicians and Surgeons Pakistan*. Vol.21(1), 4-8.
- Nugroho SP, R. (2012). Hubungan Faktor Risiko Terjadinya Acinetobacter sp. MDRO terhadap Kematian Penderita Sepsis di PICU Rumah Sakit dr Kariadi Semarang (Undergraduate). Universitas Diponegoro.
- Payen, J.-F., Bosson, J.-L., Chanques, G., Mantz, J., Labarere, J., for the DOLOREA Investigators, (2009). Pain Assessment Is Associated with Decreased Duration of Mechanical Ventilation in the Intensive Care Unit. *Anesthesiology* 111, 1308–1316. <https://doi.org/10.1097/ALN.0b013e3181c0d4f0>
- Payen, J.-F., Chanques, G., Mantz, J., Hercule, C., Auriant, I., Leguillou, J.-L., Binhas, M., Genty, C., Rolland, C., Bosson, J.-L., for the DOLOREA Investigators, (2007). Current Practices in Sedation and Analgesia for Mechanically Ventilated Critically Ill Patients. *Anesthesiology* 106, 687–695. <https://doi.org/10.1097/01.anes.0000264747.09017.da>
- PDPI. (2003). Pneumonia nosokomial. pedoman diagnosis & penatalaksanaan pneumonia nosokomial di Indonesia. Perhimpunan Dokter Paru Indonesia, Jakarta
- Rello, J., Ramirez Estrada, S., & Borgatta, B. (2016). Pseudomonas aeruginosa ventilator-associated pneumonia management. *Infection And Drug Resistance*, 7. <https://doi.org/10.2147/idr.s50669>
- Royer, S., Demerle, K. M., Dickson, R. P., & Prescott, H. C. (2018). Shorter versus longer courses of antibiotics for infection in hospitalized patients: A systematic review and meta-analysis. In *Journal of Hospital Medicine* (Vol. 13, Issue 5, pp. 336–342). Society of hospital medicine. <https://doi.org/10.12788/jhm.2905>
- Rujirojindakul, P., Geater, A. F., McNeil, E. B., Vasinanukorn, P., Prathep, S., Asim, W., & Naklongdee, J. (2012). Risk factors for reintubation in the post-anaesthetic care unit: A casecontrol study. *British Journal of Anaesthesia*, 109(4), 636–642. <https://doi.org/10.1093/bja/aes226>
- Saragih, R.J., Zulkifli, A., Sedono R. (2014). Prediktor Mortalitas Pasien dengan Ventilator Associated Pneumonia (VAP) di RS. Ciptomangunkusumo. *eJKI*. Vol.2(2):77-84.



- Seligman, R., Ramos-Lima, L.F., Oliveira, V. do A., Sanvicente, C., Sartori, J., Pacheco, E.F., (2013). Risk factors for infection with multidrug-resistant bacteria in non-ventilated patients with hospital-acquired pneumonia. *J. Bras. Pneumol. Publicação Of. Soc. Bras. Pneumol. E Tisiologia* 39, 339–348. <https://doi.org/10.1590/S1806-37132013000300011>.
- Sheng, W., Xing, Q., Hou, W., Sun, L., Niu, Z., Lin, M., & Chi, Y. (2014). Independent risk factors for ventilator-associated pneumonia after cardiac surgery. *Journal of Investigative Surgery*, 27(5), 256–261. <https://doi.org/10.3109/08941939.2014.892652>.
- Siniscalchi, A., Aurini, L., Benini, B., Gamberini, L., Nava, S., Viale, P., Faenza, S., (2016). Ventilator associated pneumonia following liver transplantation: Etiology, risk factors and outcome. *World J. Transplant.* 6, 389–395. <https://doi.org/10.5500/wjt.v6.i2.389>
- Six, S., Jaffal, K., Ledoux, G., Jaillette, E., Wallet, F., & Nseir, S. (2016). Hyperoxemia as a risk factor for ventilator-associated pneumonia. *Critical Care*, 20(1). <https://doi.org/10.1186/s13054-016-1368-4>
- Sugiyono. (2017). *Metode Penelitian Bisnis*. Bandung: Alfabeta.
- Suka, M., Yoshida, K., Takezawa, J., (2004b). Association between APACHE II score and nosocomial infections in intensive care unit patients: A multicenter cohort study. *Environ. Health Prev. Med.* 9, 262–265. <https://doi.org/10.1007/BF02898140>
- Tang, P., Wang, J., & Song, Y. (2018). Characteristics and pregnancy outcomes of patients with severe pneumonia complicating pregnancy: A retrospective study of 12 cases and a literature review. *BMC Pregnancy and Childbirth*, 18(1). <https://doi.org/10.1186/s12884-018-2070-0>
- Tang, P., Wang, Jiangshan, J., Song, Y. (2018). Characteristics and pregnancy outcomes of patients with severe pneumonia complicating pregnancy: A retrospective study of 12 cases and a literature review. *BMC Pregnancy and Childbirth*. 18, 434
- Tejerina, E., Frutos-Vivar, F., Restrepo, M.I., Anzueto, A., Abroug, F., Palizas, F., Gonzales, M., D’Empaire, G., Apeztegula, C., Esteban, A. (2006). Incidence, risk factors, and outcome of ventilator-associated pneumonia. *Journal of Critical Care*. 21(1), 56-65
- Thatrimontrichai, A., Rujeerapaiboon, N., Janjindamai, W., Dissaneevate, S., Maneenil, G., Kritsancepaiboon, S., et al. (2017). Outcomes and risk factors of ventilator-associated pneumonia in neonates. *World Journal of Pediatrics*. 13, 328-334
- Tolentino-DelosReyes, A., Ruppert, S., Shiao, P., (2007). Evidence-Based Practice: Use of the Ventilator Bundle to Prevent Ventilator-Associated Pneumonia. *Am. J. Crit. Care Off. Publ. Am. Assoc. Crit.-Care Nurses* 16, 20–7. <https://doi.org/10.4037/ajcc2007.16.1.20>
- Torres, A., Niederman, MS., & Chastre, J. (2017). International ERS/ESICM/ESCMID/ALAT Guidelines for the Management of Hospital-Acquired Pneumonia and Ventilator-Associated Pneumonia. *Eur Respir J.* 50: 1700582.
- Tsakiridou, E., Makris, D., Daniil, Z., Manoulakas, E., Chatzipantazi, V., Vlachos, O., Xidopoulos, G., Charalampidou, O., Zakynthinos, E., (2014). *Acinetobacter baumannii* Infection in Prior ICU Bed Occupants Is an Independent Risk Factor for Subsequent Cases of Ventilator-Associated Pneumonia. *BioMed Res. Int.* 2014, 1–7. <https://doi.org/10.1155/2014/193516>



- Tseng, C.-C., Huang, K.-T., Chen, Y.-C., Wang, C.-C., Liu, S.-F., Tu, M.-L., Chung, Y.-H., Fang, W.-F., Lin, M.-C., (2012). Factors Predicting Ventilator Dependence in Patients with Ventilator-Associated Pneumonia. *Sci. World J.* 2012, 1–10. <https://doi.org/10.1100/2012/547241>
- Urden, L. D., Stacy, K.M., & Lough, M.E. (2010). *Critical Care Nursing*. USA: Mosby Elsevier.
- Vardakas, K. Z., Siempos, I. I., & Falagas, M. E. (2007). DIABETIC Medicine Diabetes mellitus as a risk factor for nosocomial pneumonia and associated mortality. In *Diabetes UK. Diabetic Medicine* (Vol. 24).
- Vaughn, V. M., Flanders, S. A., Snyder, A., Conlon, A., Rogers, M. A. M., Malani, A. N., McLaughlin, E., Bloemers, S., Srinivasan, A., Nagel, J., Kaatz, S., Osterholzer, D., Thyagarajan, R., Hsaiky, L., Chopra, V., & Gandhi, T. N. (2019). Excess antibiotic treatment duration and adverse events in patients hospitalized with pneumonia: A multihospital cohort study. *Annals of Internal Medicine*, 171(3), 153–163. <https://doi.org/10.7326/M18-3640>
- Wałaszek M, Kosiarska A, Gniadek A, Kołpa M, Wolak Z, Dobroś W, Siadek, J. (2016). The risk factors for hospital-acquired pneumonia in the Intensive Care Unit. *Przegl Epidemiol.* 70(1):15–20, 107–10.
- Wu, D., Wu, C., Zhang, S., Zhong, Y. (2019). Risk factors of ventilator-associated pneumonia in critically ill patients. *Frontiers in Pharmacology*, 10, 482
- Yamashita, A., Yamasaki, M., Matsuyama, H., & Amaya, F. (2017). Risk factors and prognosis of pain events during mechanical ventilation: a retrospective study. *Journal Of Intensive Care*, 5(1). <https://doi.org/10.1186/s40560-017-0212-5>
- Zein, H., Baratloo, A., Negida, A., & Safari, S. (2016). Ventilator Weaning and Spontaneous Breathing Trials; an Educational Review. *Emergency (Tehran, Iran)*, 4(2), 65–71
- Zilahi, G., McMahon, M.A., Pova, P., Martin-Loeches, I. (2016). Duration of antibiotic therapy in the intensive care unit. *J Thorac Dis*, 8(12), 3774-3780