

DAFTAR PUSTAKA

- Abad, C.L., Formalejo, C.P. and Mantaring, D.M.L. (2021) ‘Assessment of knowledge and implementation practices of the ventilator acquired pneumonia (VAP) bundle in the intensive care unit of a private hospital’, *Antimicrobial Resistance and Infection Control*, 10(1). Available at: <https://doi.org/10.1186/s13756-021-01027-1>.
- Adiputra, I.M.S. *et al.* (2021) *Metodologi Penelitian Kesehatan*. Denpasar: Yayasan Kita Menulis.
- Affanin, R.N., Victoria, A.Z. and Nuraeni, A. (2022) ‘Hubungan Lama Penggunaan dan Frekuensi Oral Hygiene Pasien Dengan Ventilator Mekanik Terhadap Ventilator-Associated Pneumonia (VAP) di Ruang ICU’, *Pena Nursing*, 1(1), pp. 13–21. Available at: <https://doi.org/10.31941/pn.v1i01.2075>.
- Ahmed, A. and Clarke, J.O. (2023) *Proton Pump Inhibitors (PPI)*. Florida: StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK557385/>.
- Al-Omari, B. *et al.* (2021) ‘Systematic review of studies investigating ventilator associated pneumonia diagnostics in intensive care’, *BMC Pulmonary Medicine*, 21(1). Available at: <https://doi.org/10.1186/s12890-021-01560-0>.
- Alfaray, R.I., Mahfud, M.I. and Faizun, R.S. (2019) ‘Duration Of Ventilation Support Usage And Development Of Ventilator-Associated Pneumonia: When Is The Most Time At Risk?’, *Indonesian Journal of Anesthesiology and Reanimation*, 1(1), p. 26. Available at: <https://doi.org/10.20473/ijar.v1i12019.26-31>.
- Arabi, Y.M. *et al.* (2019) ‘National Approach to Standardize and Improve Mechanical Ventilation’, *Annals of Thoracic Meedicine*, 13(3), pp. 156–162. Available at: <https://doi.org/10.4103/atm.ATM>.
- Arayasukawat, P. *et al.* (2021) ‘Microorganisms and clinical outcomes of early- and late-onset ventilator-associated pneumonia at Srinagarind Hospital, a tertiary center in Northeastern Thailand’, *BMC Pulmonary Medicine*, 21(1), pp. 1–8. Available at: <https://doi.org/10.1186/s12890-021-01415-8>.
- Awalin, F., Faridah, I. and Ridwan, U.S. (2019) ‘Faktor-Faktor yang berhubungan dengan Ventilation Associated Pneumonia (VAP) pada Populasi Pasien Gangguan Persyarafan di Ruang ICU RSUD Provinsi Banten’, *Jurnal Kesehatan*, 8(2), pp. 1–15. Available at: <https://doi.org/https://doi.org/10.37048/kesehatan.v8i2.140>.
- Baid, H., Creed, F. and Hargreaves, J. (2016) *Oxford Handbook of Critical Care Nursing, 2th Edition*. New York: Oxford University Press.

- Baran, A.Ī. *et al.* (2020) ‘Evaluation of risk factors in patients with ventilator-associated pneumonia caused by acinetobacter baumannii’, *Bali Medical Journal*, 9(1), pp. 253–258. Available at: <https://doi.org/10.15562/bmj.v9i1.1751>.
- Behera, A.K. *et al.* (2024) ‘Incidence, Risk Factors and Microbiological Profile of Ventilator Associated Pneumonia Patients in ICU in Tertiary Care Hospital’, *Journal of Advances in Medical and Pharmaceutical Sciences*, 26(3), pp. 37–44. Available at: <https://doi.org/10.9734/jamps/2024/v26i3675>.
- Belay, C.M. *et al.* (2022) ‘Incidence and Predictors of Ventilator-Associated Pneumonia Among Adult Intubated Patients in Bahir Dar Specialized Hospitals, 2021: A Retrospective Follow-Up Study’, *International Journal of General Medicine*, 15(November), pp. 8173–8182. Available at: <https://doi.org/10.2147/IJGM.S380301>.
- Bickley, L.S. *et al.* (2021) *Bate’s Guide to Physical Examination and History Taking (13th ed.)*. Philadelphia: Wolters Kluwer Health.
- Bonell, A. *et al.* (2019) ‘A Systematic Review and Meta-analysis of Ventilator-associated Pneumonia in Adults in Asia: An Analysis of National Income Level on Incidence and Etiology’, *Clinical Infectious Diseases*, 68(3), pp. 511–518. Available at: <https://doi.org/10.1093/cid/ciy543>.
- Bryden, D. and Temple, A. (2017) *Case Studies in Adult Intensive Care Medicine*. Cambridge: Cambridge University Press.
- Bui, T., Patel, P. and Preuss, C.V. (2024) *Cephalosporins*. Florida: StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK551517/>.
- Burns, K. *et al.* (2021) ‘Ventilator Weaning and Discontinuation Practices for Critically Ill Patients’, *JAMA*, 325(12), pp. 752–761. Available at: <https://doi.org/10.1001/jama.2021.2384>.
- Burns, S.M. and Delgado, S.A. (2019) *AACN: Essentials of Progressive Care Nursing, 4th edition*. New York: McGraw-Hill.
- Chang, P.-H. *et al.* (2024a) ‘Risk Factors, Pathogens, and Outcomes of Ventilator-Associated Pneumonia in Non-Cardiac Surgical Patients: A Retrospective Analysis’, *Microorganisms*, 12(7), pp. 1422–1434. Available at: <https://doi.org/10.3390/microorganisms12071422>.
- Chang, P.-H. *et al.* (2024b) ‘Risk Factors, Pathogens, and Outcomes of Ventilator-Associated Pneumonia in Non-Cardiac Surgical Patients: A Retrospective Analysis’, *Microorganisms*, 12(7), p. 1422. Available at: <https://doi.org/10.3390/microorganisms12071422>.
- Comisso, I. *et al.* (2018) *Nursing in critical care setting: An overview from basic to sensitive outcomes, Nursing in Critical Care Setting: An Overview from Basic*

to Sensitive Outcomes. Available at: <https://doi.org/10.1007/978-3-319-50559-6>.

Dahlan, M.S. (2017) *Statistik Untuk Kedokteran dan Kesehatan Seri 1 Edisi 6*. Jakarta: Salemba Medika.

Dahlia, N. and Adrianto, D. (2023) ‘Gambaran Penggunaan Antibiotik Golongan β -Laktam Pada Pasien ICU Di Rumah Sakit A Periode Oktober–Desember 2022’, *Indonesian Journal of Health Science*, 3(2a), pp. 244–249. Available at: <https://doi.org/10.54957/ijhs.v3i2a.437>.

Daniel, V. *et al.* (2021) ‘International Nosocomial Infection Control Consortium (INICC) report, data summary of 45 countries for 2013-2018, Adult and Pediatric Units, Device-associated Module’, 000, pp. 1–8. Available at: <https://doi.org/10.1016/j.ajic.2021.04.077>.

Dannewitz, A.A. *et al.* (2022) ‘Optimized diagnosis-based comorbidity measures for all-cause mortality prediction in a national population-based ICU population’, *Critical Care*, 26(1), pp. 1–11. Available at: <https://doi.org/10.1186/s13054-022-04172-0>.

Darwin, M. *et al.* (2021) *Metode Penelitian Pendekatan Kuantitatif*. Bandung: Media Sains Indonesia.

Deng, J. *et al.* (2022) ‘Prevention and treatment of ventilator-associated pneumonia in COVID-19’, *Frontiers in Pharmacology*. Frontiers Media S.A. Available at: <https://doi.org/10.3389/fphar.2022.945892>.

Dennis, B.B. *et al.* (2023) ‘Proton pump inhibitors in critically ill mechanically ventilated patients with COVID-19: protocol for a substudy of the Re-Evaluating the Inhibition of Stress Erosions (REVISE) Trial’, *Trials*, 24(1), pp. 1–10. Available at: <https://doi.org/10.1186/s13063-023-07589-2>.

Dewi, A.P.T.T. *et al.* (2023) ‘Risk factors of ventilator-associated pneumonia in intensive care patients at tertiary referral hospital’, *Bali Medical Journal*, 12(2), pp. 1441–1445. Available at: <https://doi.org/10.15562/bmj.v12i2.4446>.

Divatia, J. V., Pulinilkunnathil, J. G., & Myatra, S.N. (2019) ‘No Title’, *OncologicCriticalCare*, pp. 1419–1439. Available at: https://doi.org/10.1007/978-3-319-74588-6_125.

DOI (2023) *Data Obat Indonesia Edisi 13*. Jakarta: PT Muliapurna Jayaterbit.

Febyan and Lardo, S. (2019) ‘Patogenesis Ventilator Associated Pneumonia Terkini’, *Indonesia Journal Chest*, 5(4), pp. 35–43.

Flaws, D. *et al.* (2024) ‘Time in ICU and post-intensive care syndrome: how long is long enough?’, *Critical Care*, 28(1), pp. 1–4. Available at:

<https://doi.org/10.1186/s13054-024-04812-7>.

- Freeman, S., Yorke, J. and Dark, P. (2022) ‘Critically ill patients’ experience of agitation: A qualitative meta-synthesis’, *Nursing in Critical Care*, 27(1), pp. 91–105. Available at: <https://doi.org/10.1111/nicc.12643>.
- Gaudet, A. *et al.* (2020) ‘Accuracy of the clinical pulmonary infection score to differentiate ventilator-associated tracheobronchitis from ventilator-associated pneumonia’, *Annals of Intensive Care*, 10(1). Available at: <https://doi.org/10.1186/s13613-020-00721-4>.
- Goldman, L. and Schafer, A.I. (2020) *Goldman-Cecil Medicine*. Philadelphia: Elsevier.
- Grasselli, G. *et al.* (2021) ‘Hospital-Acquired Infections in Critically Ill Patients With COVID-19’, *Chest*, 160(2), pp. 454–465. Available at: <https://doi.org/10.1016/j.chest.2021.04.002>.
- Gunalan, A. *et al.* (2021) ‘Concordance between national healthcare safety network (NHSN) surveillance criteria and clinical pulmonary infection score (CPIS) criteria for diagnosis of ventilator-associated pneumonia (VAP)’, *Indian Journal of Critical Care Medicine*, 25(3), pp. 296–298. Available at: <https://doi.org/10.5005/jp-journals-10071-23753>.
- Gunalan, A. *et al.* (2023) ‘Early- vs Late-onset Ventilator-associated Pneumonia in Critically Ill Adults : Comparison of Risk Factors , Outcome , and Microbial Profile’, *Indian Journal of Critical Care Medicine*, 27(6), pp. 411–415. Available at: <https://doi.org/10.5005/jp-journals-10071-24465>.
- Haghighat, S., Mahjobipoor, H. and Gavarti, G.S. (2022) ‘Comparative Study of the Effect of Three Oral Care Protocols on Ventilator-Associated Pneumonia in Critically Ill Patients: A Clinical Trial’, *Iranian Journal of Nursing and Midwifery Research*, 27(2), pp. 99–105. Available at: https://doi.org/10.4103/ijnmr.ijnmr_243_20.
- Haliloglu, M. *et al.* (2020) ‘A new scoring system for early diagnosis of ventilator-associated pneumonia: LUPPIS’, *Archives of Medical Science*, 16(5), pp. 1040–1048. Available at: <https://doi.org/10.5114/AOMS.2020.97965>.
- Hardani *et al.* (2020) *Metode Penelitian Kualitatif dan Kuantitatif*. Yogyakarta: Pustaka Ilmu.
- Hardisman (2021) *Tanya Jawab Metodologi Penelitian Kesehatan: Referensi Praktis Mahasiswa S1, S2, S3, PPDS dan Peneliti Pemula*. Yogyakarta: Gosyen Publishing.
- Hellyer, T.P. *et al.* (2020) ‘Biomarker-guided antibiotic stewardship in suspected ventilator-associated pneumonia (VAPrapid2): a randomised controlled trial

and process evaluation’, *The Lancet Respiratory Medicine*, 8(2), pp. 182–191. Available at: [https://doi.org/10.1016/S2213-2600\(19\)30367-4](https://doi.org/10.1016/S2213-2600(19)30367-4).

Hidalgo, J. *et al.* (2022) *Personalized Mechanical Ventilation: Improving Quality of Care*. Cham: Springer Nature Switzerland AG.

Higham, P.A. and Higham, D.P. (2019) ‘New improved gamma: Enhancing the accuracy of Goodman–Kruskal’s gamma using ROC curves’, *Behavior Research Methods*, 51(1), pp. 108–125. Available at: <https://doi.org/10.3758/s13428-018-1125-5>.

Hinkle, J.L. and Cheever, K.H. (2021) *Brunner & Suddarth’s Textbook of Medical-Surgical Nursing (Single Volume), 15th Edition*. Philadelphia: Wolters Kluwer.

Hyzy, R.C. (2017) *Evidence-Based Critical Care*. Switzerland: Springer International Publishing.

Karunaratna, I. *et al.* (2024) *Understanding Ventilator-Associated Pneumonia: Causes, Prevention, and Management*. Available at: <https://www.researchgate.net/publication/379568306>.

Kemendes RI (2021) *Data dan Informasi Kesehatan Profil Kesehatan Indonesia 2021*. Jakarta: Kemendes RI.

Kesecioglu, J. *et al.* (2024) ‘European Society of Intensive Care Medicine guidelines on end of life and palliative care in the intensive care unit’, *Intensive Care Medicine*, 50(11), pp. 1740–1766. Available at: <https://doi.org/10.1007/s00134-024-07579-1>.

Kharel, S., Bist, A. and Mishra, S.K. (2021) ‘Ventilator-associated pneumonia among ICU patients in WHO Southeast Asian region: A systematic review’, *PLoS ONE*, 16(3 March). Available at: <https://doi.org/10.1371/journal.pone.0247832>.

Khilnani, G.C. *et al.* (2019) ‘Predictors and microbiology of ventilator-associated pneumonia among patients with exacerbation of chronic obstructive pulmonary disease’, *Lung India: official organ of Indian Chest Society*, 36(6), pp. 506–511. Available at: https://doi.org/10.4103/lungindia.lungindia_13_19.

Kohbodi, G.N.A., Rajasurya, V. and Noor, A. (2023) *Ventilator-Associated Pneumonia*. Florida: StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK507711/>.

Komite Etik Penelitian dan Pengembangan Kesehatan Nasional (2021) *Pedoman dan Standar Etik Penelitian dan Pengembangan Kesehatan Nasional*. Jakarta: LPB.

- Kvålseth, T.O. (2023) ‘Association Between Nominal Categorical Variables: New Measure Formulation Based on Metric Distances and Value Validity’, *Journal of Statistical Theory and Practice*, 17(4), pp. 1–19. Available at: <https://doi.org/10.1007/s42519-023-00344-5>.
- Ladbrook, E. *et al.* (2021) ‘A systematic scoping review of the cost-impact of ventilator-associated pneumonia (VAP) intervention bundles in intensive care’, *American Journal of Infection Control*. Elsevier Inc., pp. 928–936. Available at: <https://doi.org/10.1016/j.ajic.2020.11.027>.
- Leiwakabessy, D.C.B., Yulia, R. and Herawati, F. (2024) ‘Analisis Penggunaan Antibiotik Pada Pasien Sepsis Di Intensive Care Unit (ICU) RSI Surabaya Jemursari’, *Jurnal Kesehatan Madani Medika*, 15(01), pp. 67–76.
- Li, J. *et al.* (2024) ‘Prediction models for the risk of ventilator-associated pneumonia in patients on mechanical ventilation: A systematic review and meta-analysis’, *American Journal of Infection Control* [Preprint]. Elsevier Inc. Available at: <https://doi.org/10.1016/j.ajic.2024.07.006>.
- Li, W. *et al.* (2024) ‘Incidence and risk factors of ventilator-associated pneumonia in the intensive care unit: a systematic review and meta-analysis’, *Journal of Thoracic Disease*, 16(9), pp. 5518–5528. Available at: <https://doi.org/10.21037/jtd-24-150>.
- Liang, Y. *et al.* (2022) ‘Early prediction of ventilator-associated pneumonia in critical care patients: a machine learning model’, *BMC Pulmonary Medicine*, 22(1), pp. 1–9. Available at: <https://doi.org/10.1186/s12890-022-02031-w>.
- Lin, X. and Kück, U. (2022) ‘Cephalosporins as key lead generation beta-lactam antibiotics’, *Applied Microbiology and Biotechnology*, 106(24), pp. 8007–8020. Available at: <https://doi.org/10.1007/s00253-022-12272-8>.
- Liu, Y. (2017) ‘A Short Note on Spearman Correlation: Impact of Tied Observations’, *SSRN Electronic Journal*, pp. 1–12. Available at: <https://doi.org/10.2139/ssrn.2933193>.
- LoBiondo-Wood, G. and Haber, J. (2022) *Nursing research: Methods and critical appraisal for evidence-based practice, 10 ed.* Amsterdam: Mosby Elsevier.
- Machali, I. (2021) *Metode Penelitian Kuantitatif: Panduan Praktis Merencanakan, Melaksanakan, dan Analisis dalam Penelitian Kuantitatif*. Yogyakarta: Fakultas Ilmu Tarbiyah dan Keguruan Universitas Islam Negeri (UIN) Sunan Kalijaga Yogyakarta.
- Maria, Y. *et al.* (2022) ‘Faktor-Faktor yang Berhubungan dengan Ventilator Associate Pneumonia di Ruang Intensive Care Unit Rumah Sakit Umum Kabupaten Tangerang’, *Jurnal Epidemiologi Kesehatan Indonesia*, 6(2), pp. 119–123. Available at: <https://doi.org/10.7454/epidkes.v6i2.6367>.

- Marini, J.J. and Dries, D.J. (2019) *Critical Care Medicine: The Essentials and More, Fifth edition*. Philadelphia: Wolters Kluwer.
- Martin-Loeches, I., Leone, M. and Einav, S. (2020) ‘Antibiotic prophylaxis in the ICU: to be or not to be administered for patients undergoing procedures?’, *Intensive Care Medicine*, 46(2), pp. 364–367. Available at: <https://doi.org/10.1007/s00134-019-05870-0>.
- Martinez-Reviejo, R. *et al.* (2023) ‘Prevention of ventilator-associated pneumonia through care bundles: A systematic review and meta-analysis’, *Journal of Intensive Medicine*, 3(4), pp. 352–364. Available at: <https://doi.org/10.1016/j.jointm.2023.04.004>.
- Meng, H. *et al.* (2024) ‘Prediction model, risk factor score and ventilator-associated pneumonia: A two-stage case-control study’, *Journal of Microbiology, Immunology and Infection* [Preprint], (June). Available at: <https://doi.org/10.1016/j.jmii.2024.11.005>.
- Merdji, H. *et al.* (2023) ‘Sex and gender differences in intensive care medicine’, *Intensive Care Medicine*, 49(10), pp. 1155–1167. Available at: <https://doi.org/10.1007/s00134-023-07194-6>.
- Mert, D. *et al.* (2024) ‘Six-year evaluation of device-associated nosocomial infections in intensive care units’, *Journal of Infection in Developing Countries*, 18(6), pp. 937–942. Available at: <https://doi.org/10.3855/jidc.19426>.
- Mori, H. *et al.* (2020) ‘Predictors of prolonged mechanical ventilation identified at an emergency visit for elderly people: A retrospective cohort study’, *Medicine (United States)*, 99(49), p. E23472. Available at: <https://doi.org/10.1097/MD.00000000000023472>.
- Muhsinah, S. *et al.* (2023) *Pengantar Keperawatan Kritis*. Medan: Yayasan Kita Menulis.
- Murdiana, H.E. (2021) ‘The identification of drug related problems (DRPs) using profilaxis antibiotics in orthopedic surgical patients at a Government Hospital in Yogyakarta’, *Jurnal Ilmiah Farmasi*, 17(2), pp. 210–225. Available at: <https://doi.org/10.20885/jif.vol17.iss2.art10>.
- Newson, R.B. (2022) ‘Interpretation of Somers ’ D under four simple models’, *Population (English Edition)*, (3), pp. 1–6.
- Owens, P.L. *et al.* (2022) ‘Comorbidities Associated With Adult Inpatient Stays, 2019’, *Healthcare Cost and Utilization Project (HCUP) Statistical Briefs*, pp. 1–17. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/28498196>.
- Panjaitan, D.K., Sinatra, J. and Siahaan, D.L. (2021) *Literature Review Hubungan*

Penggunaan Ventilator Mekanik Terhadap Kejadian Ventilator Associated Pneumonia (VAP), Jurnal Kedokteran Methodist. Available at: <https://ejournal.methodist.ac.id/index.php/jkm/article/view/639>.

Paputungan, F. (2023) ‘Karakteristik Perkembangan Masa Dewasa Awal Developmental Characteristics of Early Adulthood’, *Media Online) Journal of Education and Culture (JEaC)*, 3(1), pp. 2986–1012.

Patel, P. *et al.* (2023) *Antibiotics*. Florida: StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK535443/>.

Peraturan Menteri Kesehatan (2017) *Pedoman Pencegahan dan Pengendalian Infeksi Di Fasilitas Pelayanan Kesehatan, Menteri Kesehatan Republik Indonesia*.

PERDALIN (2021) ‘Ventilator-Associated Pneumonia (VAP) terkait penggunaan ventilator’.

Peres, I.T. *et al.* (2020) ‘What factors predict length of stay in the intensive care unit? Systematic review and meta-analysis’, *Journal of Critical Care*, 60, pp. 183–194. Available at: <https://doi.org/10.1016/j.jcrc.2020.08.003>.

Pozuelo-Carrascosa, D.P. *et al.* (2022) ‘Body position for preventing ventilator-associated pneumonia for critically ill patients: a systematic review and network meta-analysis’, *Journal of Intensive Care*, 10(1), pp. 1–14. Available at: <https://doi.org/10.1186/s40560-022-00600-z>.

Prabowo, R.K. and Irmawati, N.D. (2022) ‘The Effectiveness Of Toothbrushing Using Chlorhexidine Gluconate 0.2% On Ventilator Associated Pneumonia (Vap)’, *Midwifery and Nursing Research*, 4(2), pp. 53–57. Available at: <https://doi.org/10.31983/manr.v4i2.7975>.

Prendergast, N.T. *et al.* (2023) ‘Agitation is a Common Barrier to Recovery of ICU Patients’, *Journal of Intensive Care Medicine*, 38(2), pp. 208–214. Available at: <https://doi.org/10.1177/08850666221134262>.

Pugin, J. *et al.* (1991) ‘Diagnosis of ventilator-associated pneumonia by bacteriologic analysis of bronchoscopic and nonbronchoscopic “blind” bronchoalveolar lavage fluid’, *American Review of Respiratory Disease*, 143(5 I), pp. 1121–1129. Available at: https://doi.org/10.1164/ajrccm/143.5_pt_1.1121.

R., R.K. and Hegde, S.S. (2020) ‘A study on poor prognostic factors associated with ventilator associated pneumonia at a tertiary care hospital’, *International Journal of Advances in Medicine*, 7(6), pp. 906–911. Available at: <https://doi.org/10.18203/2349-3933.ijam20202102>.

Räsänen, J. (2021) ‘Age and ageing: What do they mean?’, *Ratio*, 34(1), pp. 33–

43. Available at: <https://doi.org/10.1111/rati.12284>.
- Rinaldi, S.F. and Mujiyanto, B. (2017) *Metodologi Penelitian dan Statistik*. Jakarta: Kemenkes RI.
- Riset Kesehatan Dasar (2018) *Laporan Nasional Riskesdas 2018*. Jakarta: Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan.
- Rohman, M.M. *et al.* (2023) *Metodologi Penelitian Kualitatif dan Kuantitatif*. Yogyakarta: PT Penamuda Media.
- Rosenthal, V.D. *et al.* (2020) ‘International Nosocomial Infection Control Consortium (INICC) report, data summary of 45 countries for 2012-2017: Device-associated module’, *American Journal of Infection Control*, 48(4), pp. 423–432. Available at: <https://doi.org/10.1016/j.ajic.2019.08.023>.
- Salsabilah, N. *et al.* (no date) *Faktor-Faktor yang Berpengaruh Terhadap Kejadian Ventilator Associated Pneumonia*.
- Santoro, A., Bientinesi, E. and Monti, D. (2021) ‘Immunosenescence and inflammaging in the aging process: age-related diseases or longevity?’, *Ageing Research Reviews*, 71. Available at: <https://doi.org/10.1016/j.arr.2021.101422>.
- Setyawan, D.A. (2022) *Statistika Kesehatan Analisis Bivariat Hipotesis Penelitian, Tahta Media Group*. Sukoharjo: Tahta Media Group.
- Shah, H. *et al.* (2022) ‘Trends and Factors Associated With Ventilator-Associated Pneumonia: A National Perspective’, *Cureus* [Preprint]. Available at: <https://doi.org/10.7759/cureus.23634>.
- Sikora, A. & Zahra, F. (2023) *Nosocomial Infections*. Florida: StatPearls Publishing. Available at: <http://www.ncbi.nlm.nih.gov/books/nbk559312/>.
- Singh, S., Pelosi, P. and Morris, A.C. (2023) *Oxford Textbook of Respiratory Critical Care*. Oxford: Oxford University Press. Available at: <https://doi.org/10.1093/med/9780198766438.001.0001>.
- Siregar, M.H. *et al.* (2021) *Metodologi Penelitian Kesehatan*. Sigli: Yayasan Penerbit Muhammad Zaini.
- Sugiyono (2017) *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: CV. Alfabeta.
- Sukmadi, A. (2023) *Efektivitas Suction Above Cuff Endotracheal Tube Dalam Mencegah Ventilator Associated Pneumonia Pada Pasien Kritis*. Purwokerto: PT. Pena Persada Kerta Utama.

- Sumara, R., Wibowo, N.A. and Wulandari, T.R. (2021) 'Faktor Yang Berhubungan Dengan VAP (Ventilator Associated Pneumonia) Pada Pasien Yang Terpasang Ventilasi Mekanik Di Ruang ICU RSUD Haji Surabaya', *Jurnal Keperawatan Muhammadiyah*, 6(3), pp. 204–213. Available at: <https://doi.org/10.30651/jkm.v7i3.15974>.
- Sun, Y. chen *et al.* (2022) 'Probiotic in the prevention of ventilator-associated pneumonia in critically ill patients: evidence from meta-analysis and trial sequential analysis of randomized clinical trials', *BMC Pulmonary Medicine*, 22(1), pp. 1–12. Available at: <https://doi.org/10.1186/s12890-022-01965-5>.
- Suryadinata, R.V., Priskila, O. and Wicaksono, A.S. (2021) *Analisis Data Kesehatan Statistika Dasar dan Korelasi (jilid 1)*. Surabaya: Direktorat Penerbitan dan Publikasi Ilmiah.
- Syapitri, H., Amila and Aritonang, J. (2021) *Buku Ajar Metodologi Penelitian Kesehatan*. Malang: Ahlimedia Press.
- Tamma, P.D. *et al.* (2024) 'Infectious Diseases Society of America 2024 Guidance on the Treatment of Antimicrobial-Resistant Gram-Negative Infections', *Clinical Infectious Diseases*, 00(0), pp. 1–56. Available at: <https://doi.org/10.1093/cid/ciae403>.
- Thakur, H.K. *et al.* (2024) 'Pathogenesis, Diagnosis and Therapeutic Strategies for Ventilator-associated Pneumonia', *Journal of Pure and Applied Microbiology*, 18(2), pp. 772–796. Available at: <https://doi.org/10.22207/JPAM.18.2.10>.
- Turkistani, R. *et al.* (2024) 'The Effect of Ventilator-Associated Pneumonia on the Time-to-Extubation in Adult and Pediatric Intensive Care Unit Patients Requiring Mechanical Ventilation: A Retrospective Cohort Study', *Cureus*, 16(1), pp. 1–9. Available at: <https://doi.org/10.7759/cureus.52070>.
- Urden, L.D., Stacy, K.M. and Lough, M.E. (2018) *Critical Care Nursing: Diagnosis and Management Ed 8*. Missouri: Elsevier.
- Virani, S.S. *et al.* (2021) *Heart Disease and Stroke Statistics - 2021 Update: A Report From the American Heart Association, Circulation*. Available at: <https://doi.org/10.1161/CIR.0000000000000950>.
- Waheed, S.M., Kudaravalli, P. and Hotwagner, D.T. (2023) *Deep Vein Thrombosis*. Florida: StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK507708/>.
- WHO (2018) *Epidemiology And Prevention Of Hospital Acquired/Ventilator associated Pneumonia*. Available at: https://www.who.int/ncds/surveillance/gshs/GSHS_2015_Indonesia_Report_Bahasa.pdf.

- Wu, D. *et al.* (2019) ‘Risk factors of ventilator-associated pneumonia in critically III patients’, *Frontiers in Pharmacology*. Frontiers Media S.A. Available at: <https://doi.org/10.3389/fphar.2019.00482>.
- Wulan, D.R., Kusumajaya, H. and Meilando, R. (2024) ‘Faktor-Faktor Yang Berhubungan Dengan Kejadian Ventilator Associated Pneumonia (VAP) Pada Pasien Kritis’, *Jurnal Keperawatan Holistik*, 1(1), pp. 10–21. Available at: <https://doi.org/10.69549/vz699n66>.
- Xie, X. *et al.* (2019) ‘Drug prevention and control of ventilator-associated pneumonia’, *Frontiers in Pharmacology*, 10(MAR), pp. 1–9. Available at: <https://doi.org/10.3389/fphar.2019.00298>.
- Xu, Y. *et al.* (2019) ‘Risk factors of ventilator-associated pneumonia in elderly patients receiving mechanical ventilation’, *Clinical Interventions in Aging*, 14, pp. 1027–1038. Available at: <https://doi.org/10.2147/CIA.S197146>.
- Yang, R. *et al.* (2022) ‘The Use of Antibiotics for Ventilator-Associated Pneumonia in the MIMIC-IV Database’, *Frontiers in Pharmacology*, 13(June), pp. 1–9. Available at: <https://doi.org/10.3389/fphar.2022.869499>.
- Yu, Z. *et al.* (2024) ‘Epidemiological characteristics of ventilator-associated pneumonia in neurosurgery: A 10-year surveillance study in a Chinese tertiary hospital’, *Infectious Medicine*, 3(3). Available at: <https://doi.org/10.1016/j.imj.2024.100128>.
- Zha, S. *et al.* (2023) ‘Prophylactic antibiotics for preventing ventilator-associated pneumonia: a pairwise and Bayesian network meta-analysis’, *European Journal of Medical Research*, 28(1), pp. 1–12. Available at: <https://doi.org/10.1186/s40001-023-01323-z>.