

BAB 5

KESIMPULAN DAN SARAN

5.1. Kesimpulan

Praktek Kerja Profesi Apoteker di Rumah Sakit Katolik St. Vincetius a Paulo Surabaya dilaksanakan secara luring atau *offline* pada tanggal 12 September hingga 5 November 2022. Selama PKPA di RKZ didapatkan kesimpulan antara lain:

1. Mahasiswa calon Apoteker mendapatkan gambaran tentang pelayanan kefarmasian di Rumah Sakit Katolik St. Vincetius a Paulo Surabaya sesuai dengan Standar Pelayanan Kefarmasian yang telah diatur dalam Peraturan Menteri Kesehatan Nomor 76 tahun 2016 berupa kegiatan manajerial dan pelayanan farmasi klinis.
2. Mahasiswa calon Apoteker dapat mengaplikasikan teori selama perkuliahan dengan berpraktek secara langsung untuk melihat kondisi dilapangan secara nyata tentang fungsi dan peran Apoteker bila menemukan suatu permasalahan serta *problem solving* dan dapat berkomunikasi dengan tenaga medis lain.
3. Mahasiswa calon Apoteker dapat langsung berpraktek sehingga mengetahui peran Apoteker dalam manajerial yang meliputi pemilihan, perencanaan, pengadaan, penerimaan, penyimpanan, pendistribusian, pemusnahan, penarikan, pengendalian, administrasi dan pelaporan melalui pembelajaran dari preceptor Apoteker unit pembelian dan unit gudang perbekalan farmasi Rumah Sakit Katolik St. Vincetius a Paulo Surabaya.
4. Mahasiswa calon Apoteker mengetahui peran Apoteker dalam kegiatan pelayanan faramsi klinik meliputi pengkajian dan pelayanan resep rawat jalan dan rawat inap melalui preceptor Apoteker di unit farmasi GSY Rumah Sakit Katolik St. Vincetius a Paulo Surabaya.
5. Mahasiswa calon Apoteker mengetahui peran Apoteker dalam kegiatan pelayanan faramsi klinik meliputi pemantauan terapi obat di paviliun beserta visite bersama tenaga medis yang lain, monitoring efek samping obat, rekonsiliasi obat, konseling, dan KIE melalui preceptor farmasi klinis Rumah Sakit Katolik St. Vincetius a Paulo Surabaya.

5.2. Saran

Saran yang dapat diberikan setelah melaksanakan Praktek Kerja Profesi Apoteker di Rumah Sakit Katolik St. Vincetius a Paulo Surabaya adalah:

1. Sebelum melaksanakan PKPA di Rumah Sakit sebaiknya terlebih dahulu calon Apoteker membekali diri tentang Standar Pelayanan Kefarmasian menurut Peraturan Menteri Kesehatan Nomor 76 tahun 2016 agar dapat mendalami secara praktek.
2. Mahasiswa calon Apoteker lebih percaya diri dalam berdiskusi dan berkomunikasi dengan preceptor atau tenaga medis lain.
3. Mahasiswa calon Apoteker secara aktif bertanya kepada rekan atau karyawan yang ada di farmasi Rumah Sakit Katolik St. Vincetius a Paulo Surabaya agar memperoleh informasi sebagai tambahan ilmu dan bekal untuk memasuki dunia kerja.
4. Rumah Sakit Katolik St. Vincetius a Paulo Surabaya melakukan renovasi secara sistem di unit Kamar Bedah agar stok perbekalan farmasi yang ada di dalam unit tersebut lebih terjaga.



DAFTAR PUSTAKA

- Aberg, J.A., Lacy,C.F, Amstrong, L.L, Goldman, M.P, and Lance, L.L., 2009, *Drug Information Handbook*, 17th edition, Lexi-Comp for the American Pharmacists Association.
- Aberg, J.A., Lacy,C.F, Amstrong, L.L, Goldman, M.P, and Lance, L.L., 2014 ,*Drug Information Handbook*, 23Thedition, Lexi-Comp for the American Pharmacists Association diakses Oktober 2022.
- Agrawal, A.A. 2015, Gingival Enlargements: Differential Diagnosis and Review of Literature, *World Journal of Clinical Cases*, **3(9)**: 779-788
- Ameloot, K., *et al.* 2020, Optimum Blood Pressure in Patients With Shock After Acute Myocardial Infarction and Cardiac Arrest, *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*, 76 (7).
- American College of Rheumatology, Guideline for the Management of Gout, *Arthritis Care and Research*, 1-17.
- American Diabetes Association, 2021, Glycemic Targets: Standards of Medical Care in Diabetes, American Diabetes Association.
- American Diabetes Association, 2022, Introduction: Standards of Medical Care in Diabetes, American Diabetes Association.
- Annonymous, 2019, Bedtime Blood Pressure Meds May Cut Heart Risk by Almost Half: Large Randomised Study, *Cardiovascular Journal of Africa*, **30(6)**: 369-372.
- American Pharmacist Association, 2015, *Drug Information Handbook with International Trade Names Index*, 23rd ed., Lexicomp, Ohio.
- Atmaja, K.S., Wicaksana, G.O.S., Robin, G.D., Mataram, P.H., and Andryani, P.E. 2021, Asthma Related to Gastroesophageal Reflux Disease: A Case Report and Review, *International Journal of Advances in Medicine*, **8(4)**: 603-606
- Atreya, A.R., Priya, A., Pack, Q.R., Pekow, P.S., Stefan, M., Lagu, T., Lotfi, A.S., and Lindenauer, P.K. 2019, Use and Outcomes Associated with Perioperative Amiodarone in Cardiac Surgery, *Journal of the American Heart Association*, **8(15)**: 1-12.
- Bassetti, M., Vena, A., Croxatto, A., Righi, E. and Guery, B., 2018, How to Manage *Pseudomonas aeruginosa* Infections, *Drug in Context*, **7**: 1-18.
- Beasley, R., Holliday, M., Reddel, H.K., Braithwaite, I., Ebmeier, S., Hancox, R.J., Harrison, T., Houghton, C., Oldfield, K., Papi, A., Pavord, I.D., Williams, M., and Weatherall, M. 2019, Controlled Trial of Budesonide-Formoterol as Needed for Mild Asthma, *The New England Journal of Medicine*, **380**: 2020-2030
- Biancatelli, R.M.C., Congedo, V., Calvosa, L., Ciacciarelli, M., Polidoro, A., and Iuliano, L. 2019, Adverse reactions of Amiodarone, *Journal of Geriatric Cardiology*, **16(7)**: 552-566
- BNF, 2021, *British National Formulary*, 81st ed., BMJ Publishing Group, London.

- Boudonas, G.E. 2010, Beta-Blockers in Coronary Artery Disease, Hippokratia, 14(4): 231-235
- Ciapponi, A., Pizarro, R., and Harrison, J., 2017, Trimetazidine for stable angina, Cochrane Library.
- Dennison-himmelfarb C., Handler J. and Lackland D.T., 2014, Evidence-Based Guideline for the Management of High Blood Pressure in Adults Report from the Panel Members Appointed to the Eighth Joint National Committee (JNC 8), **1097**, 1–14
- Dipiro, J.T., Yee, G.C., Posey, M.L., Haines, S.T., Nolin, T.D., and Ellingrod, V., 2020, *Pharmacotherapy: A Pathophysiologic Approach*, Eleventh Edition, McGraw Hill, New York.
- Drugbank, “Amiodarone HCL”. Drugbank, Diakses pada Oktober 2022, <https://go.drugbank.com/drugs/DB01118>
- Drugbank, “Aminophylline”. Drugbank, Diakses pada Oktober 2022, <https://go.drugbank.com/drugs/DB01223>
- Drugbank, “Atorvastatin”. Drugbank, Diakses pada Oktober 2022, <https://go.drugbank.com/drugs/DB01076>
- Drugbank, “Levocetirizine”. Drugbank, Diakses pada Oktober 2022, <https://go.drugbank.com/drugs/DB06282>
- Drugbank, “Oxetacaine”. Drugbank, Diakses pada Oktober 2022, <https://go.drugbank.com/drugs/DB12532>
- Drugbank, “Salbutamol”. Drugbank, Diakses pada Oktober 2022, <https://go.drugbank.com/drugs/DB01001>
- Edward, N.L., 2009, Febuxostat: a new treatment for hyperuricemia in gout, *Rheumatology*, **48(3)**: 19.
- ESC, 2022, <https://www.escardio.org/The-ESC/Press-Office/Press-releases/Patients-with-coronary-artery-disease-should-receive-P2Y12-inhibitor-instead-of-aspirin>, diakses pada 2 November 2022.
- ESC, 2022, <https://www.escardio.org/The-ESC/Press-Office/Press-releases/Patients-with-coronary-artery-disease-should-receive-P2Y12-inhibitor-instead-of-aspirin>, diakses pada 17 November 2022.
- ESC, 2022, [ESC/ESH Guidelines on Arterial Hypertension \(Management of\) \(escardio.org\)](https://www.escardio.org/The-ESC/Press-Office/Press-releases/Patients-with-coronary-artery-disease-should-receive-P2Y12-inhibitor-instead-of-aspirin), diakses pada November 2022.
- ESC, 2020, *Guideline for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS)*.
- Florek, J.B., and Girzadas, D. 2022, *Amiodarone*, StatPearls Publishing, Treasure Island
- Global Initiative for Asthma. 2019, *Global Strategy for Asthma Management and Prevention*, GINA

- Gupta, S., Pepper, R. J., Ashman, N. and Walsh, S. B., Nephrotic Syndrome: Oedema Formation and Its Treatment with Diuretics, *Frontiers in Physiology*, **9(1868)**: 1-10.
- Gupta, M., and Iqbal, MA., 2022, Cardiogenic Pulmonary Edema, *Start Pearls*.
- Habibollahi, P., Jam. S.H., Vahdati, S.S., Baghi, H.M., and Amiri, H. 2016, Amiodarone in Atrial Fibrillation: Post Coronary Artery ByPass Graft, *World Journal of Emergency Medicine*, **7(4)**: 250-254
- Hsu PI, Lai KH, Liu CP. 2011 Esomeprazole with Clopidogrel Reduces Peptic Ulcer Recurrence, Compared with Clopidogrel Alone, in Patients with Atherosclerosis. *Gastroenterology*.**140(3)**:791-8
- James PA, Ortiz E, et al. 2014. Evidence-Based Guideline for the Management of High Blood Pressure in Adults: (JNC8), *JAMA*, **311(5)**: 507-20
- Kalil, A.C., Metersky, M.L., Klompas, M., et al. 2016, Management of Adults with Hospital-acquired and Ventilator-associated Pneumonia: 2016 Clinical Practice Guidelines by the Infection Diseases Society of America and the American Thoracic Society, *Infection Disease Society of America*, **63**: e61-e111
- Kementerian Kesehatan Republik Indonesia, 2013, *Pedoman Teknis Penemuan dan Tatalaksana Hipertensi*, Kemenker RI, Jakarta.
- Kementerian Kesehatan Republik Indonesia, 2020, *Pedoman Nasional Pelayanan Kedokteran Tata Laksana Tuberkulosis*, Jakarta.
- Kerola, T., Eranti, A., et al. 2019. Risk Factors Associated with Atrioventricular Block, *JAMA Network Open*, **2(5)**: 1-13
- Kim, J. H., Shim, J. S., Choi, H., Park, J. Y., Kwon, S. S. and Bae, J. H., 2018, Who are suitable for low-dose tamsulosin monotherapy as initial treatment strategy in male patients with lower urinary tract symptoms, *Medicine*, **97(44)**: 1-7.
- Knuuti, J., Wijins, W., Saraste, A., Copodanno, D., Barbato, E., Brentano, C.F., Prescott, E., Storey, R.F., et al. 2019, 2019 ESC Guidelines for the diagnosis and management of chronic coronary syndromes: The Task Force for the diagnosis and management of chronic coronary syndromes of the European Society of Cardiology (ESC), *European Heart Journal*, **41(3)**: 407-477
- Krishnasamy, S. and Abell, T. L., 2018, Diabetic Gastroparesis: Principles and Current Trends in Management, *Diabetes Therapy*, **9**: 1-42.
- Kulkarni, A. P., et al., 2019, Indian Antimicrobial Prescription Guidelines in Critically Ill Immunocompromised Patients, *Indian Journal of Critical Care Medicine*, 64-96.
- Labetoulle, M., et al., 2022, Artificial Tears: Biological Role of Their Ingredients in the Management of Dry Eye Disease, *International Journal of Molecular Sciences*, **22(2434)**: 1-16.
- Lamberts, M., Gislason, G.H., Lip, G.Y.H., Lassen, J.F., Olesen, J.B., Mikkelsen, A.P., Sorensen, R., Kober, L., Pedersen, C. P., and Hansen, M.L. 2014, Antiplatelet Therapy

- for Stable Coronary Artery Disease in Atrial Fibrillation Patients taking an Oral Anticoagulant, *Circulation*, **129(15)**: 1577-1585.
- Lauritano, D., Lucchese, A., Stasio, D.D., Vella, F.D., Cura, F., Palmieri, A. and Carinci, F. 2019, Molecular Aspects of Drug-Induced Gingival Overgrowth: An In Vitro Study on Amlodipine and Gingival Fibroblasts, *International Journal of Molecular Sciences*, **20(2047)**:1-8
- Lawton, J.S., Jacqueline, C., Holland, T.m et al. 2022, 2021 ACC/AHA/SCAI Guideline for Coronary Artery Revascularization: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines, *Circulation*, **145(3)**: e18-e144
- Lee, T. C., Wilson, M. G., Lawandi, A. and McDonald, E. G., 2021, Proton Pump Inhibitors Versus Histamine-2 Receptor Antagonist Likely Increase Mortality in Critical Care: An Updated Meta-Analysis, *The American Journal of Medicine*, **134(3)**: 184-188.
- Levi, C., Wei, C., Wang, X., Yao, H., Wang, B., and Guo, R. 2013, The Influence of Food on the Pharmacokinetics of Amlodipine and Losartan after Single-Dose of its Compound Tablets in Healthy Chinese Subjects, *Food Influence on the Pharmacokinetics Drug*, **64**: 229-235.
- Lewis, P.O., 2021, Risk Factor Evaluation for Methicillin-Resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa* in Community-Acquired Pneumonia, *Annals of Pharmacotherapy*, 55 (1) 36–43.
- Lexicomp, 2022, Lexicomp [aplikasi], Diakses pada Oktober 2022
- Lin, Z., Wong, F. L., Cheung, B. M., Diuretic-induced Hypokalaemia: An Updated Review, *Postgraduate Medical Journal*, **98(1160)**: 477-482.
- Lipman, Z. M., Labib, A. and Yosipovitch, G., 2021, Current Clinical Options for the Management of Itch in Atopic Dermatitis, *Clinical, Cosmetic and Investigational Dermatology*, **14**: 959-969.
- McEvoy, Gerald, K, et al. 2011, *AHFS Drug Information Essentials*, American Society of Health System Pharmacist, Bethesda, Maryland.
- McKeever, R.G., and Hamilton, R.J. 2022, *Calcium Channel Blockers*, StatPearls Publishing, Treasure Island
- Medicines.org.uk, Diakses pada Oktober 2022, <https://www.medicines.org.uk/emc/product/1515/smpc#gref>
- Metlay, J.P., Waterer, G.W., Long, A.C., Anzueto, A., et al. 2019, Diagnosis and Treatment of Adults with Community-acquired Pneumonia. An Official Clinical Practice Guideline of the American Thoracic Society and Infectious Diseases Society of America, *American Thoracic Society Documents*, **200(7)**: e45-e67
- Micromedex, 2022, Micromedex [aplikasi], Diakses pada Oktober 2022

- MIMS, “Strocain P”. MIMS Indonesia, Diakses pada Oktober 2022, <https://www.mims.com/indonesia/drug/info/strocain%20p>
- Mochtar, C. A., Umbas, R. Soebadi, D. M., Rasyid, N., Noegroho, B. S., Poernomo, B. B., Tjahjodjati, Danarto, H. R., Wijanarko, S., Warli, S. M dan Hamid, A. R., 2015, *Panduan Penatalaksanaan Klinis Pembesaran Prostat Jinak, Ikatan Ahli Urologi Indonesia (IAUI)*, Jakarta.
- Moukarbel. G.V., and bhatt, D.L. 2012, Antiplatelet Therapy and Proton Pump Inhibition, *Circulation*, **125**: 375-380
- Mulla, S., and Siddiqui. W.J. 2022, *Losartan*, StatPearls Publishing, Treasure Island
- Nih.gov, Diakses pada Oktober 2022, [Antiemetic drugs: what to prescribe and when - PMC \(nih.gov\)](#)
- Nhs.Uk, “How to treat a sore throat yourself” Diakses pada oktober 2022, <https://www.nhs.uk/conditions/sore-throat/>
- Nhs.Uk, Diakses pada oktober 2022 www.nhs.uk/medicines/atorvastatin/
- Nguyen, K., Dersnah, G. D. and Ahlawat, R., 2022, *Famotidine*, Statpearls.
- Oceja, A., and Correa, R. 2022, *Methylprednisolone*, StatPearls Publishing, Treasure Island
- Oesterle, A. and Liao, J. K., 2019, The Pleiotropic Effects of Statins-From Coronary Artery Disease and Stroke to Atrial Fibrillation and Ventricular Tachyarrhythmia, *Current Vascular Pharmacology*, **17(3)**: 222-232.
- Oesterle, A., Laufs, U. and Liao, K. J., 2017, Pleiotropic Effects of Statins on the Cardiovascular System, *Circulation Research*, **120**: 229-243.
- Ozgoz, M., and Arabaci, T. 2018, Chronic Inflammatory Gingival Enlargement and Treatment: a Case Report, *Advances in Dentistry and Oral Health*, **9(4)**: 00109-00111
- Perhimpunan Dokter Hipertensi Indonesia, Konsesus Penatalaksanaan Hipertensi 2021 : Update Konsensus PERHI, 2019.
- Pasini, E., Aquilani, R., Testa, C., Biardi, P., Angioletti, S., Boschi, F., and Dioguardi, F., 2016, Pathogenic Gut Glora in Patients with Chronic Heart Failure, *JACC: Heart Failure*, **4(3)**: 228-229
- Peechakara, B.V., and Gupta, M. 2022, *Ampicillin/Sulbactam*, StatPearls Publishing, Treassure Island
- Peng, Q., and Yang, Q. 2021, Risk Factors and Management of Pulmonary Infection in Elderly Patients with Heart Failure, *Medicine*, **100(38)**: 1-5
- Perhimpunan Dokter Spesialis Kardiovaskular Indonesia, 2015, *Pedoman Tatalaksana Hipertensi pada Penyakit Kardiovaskular*, Edisi Pertama, PERKI, Indonesia.
- Perki, 2014, *Pedoman Tatalaksana Fibrilasi Atrium*, Perhimpunan Dokter Spesialis Kardiovaskular Indonesia, Jakarta

- Perki, 2018, *Pedoman Tatalaksana Sindrom Koroner Akut*, Perhimpunan Dokter Spesialis Kardiovaskular Indonesia, Jakarta
- Perki, 2020, *Pedoman Tatalaksana Gagal Jantung*, Perhimpunan Dokter Spesialis Kardiovaskular Indonesia, Jakarta
- Perkumpulan Endokrinologi Indonesia, 2021, *Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 Dewasa di Indonesia*, Edisi pertama, PB PERKENI, Indonesia.
- Rehman, B., Sanchez, D. P. and Shah, S., 2022, *Atenolol*, StatPearls.
- Rosendorff, C., Lackland D.T., Allison, M., Aronow, W.S., et al., 2015, Treatment of Hypertension in Patients with Coronary Artery Disease, Hypertension in American Heart Association, American College of Cardiology, and American Society of Hypertension, **65(6)**: 1372-1407
- Rushakoff, R. J., 2019, <https://www.ncbi.nlm.nih.gov/books/NBK278972/>, diakses pada 9 November 2022.
- Salaoui, S., Elhouari, B., and Kissa, J. 2019, Amlodipine Induced Gingival Overgrowth, Unusual Defect and The Impact of Oral Environment: A Case Report. *Journal of Density, Oral Disorders & Therapy*, **7(1)**: 1-5.
- Sandman, Z., Iqbal, O.A. 2022, *Azithromycin*, StatPeals Publishing, Treasure Island
- Srivastava, A.K., Kundu, D., Bandyopandhay, P., and Pal, A.K. 2010, Management of Amlodipine-Induced Gingival Enlargement: Series of Three Cases, *Journal of Indian Society of Periodontology*, **14(4)**: 279-281
- Sucu, M., Yuce, M., and Davutoglu, V. 2011. Amlodipine-induced massive gingival hypertrophy. *Canadian Family Physician*, **57**: 463.
- Sung, J.J.Y., Barkun, A., Kuipers, E.J., Mossner, J., Jensen, D.M., Stuart, R., Lau, J., Ahlbom, H., Kilhamm, J., and Lind, T. 2009, Intravenous Esomeprazole for Prevention of Recurrent Peptic Ulcer Bleeding: A Randomized Trial, *Ann Intern Med.*, **150(7)**: 455-464
- Sweetman, S.C. 2009, *Martindale Edition the Complete Drug Reference*, Pharmaceutical Press, London
- Taib, H., Radzwan, M.H.M., Sabaruddin, M.A., Mohamad, W.M.W and Mohamad, N. 2021, Prevalence and Risk Factors of Drug-induced Gingival Overgrowth in Hypertensive Patients, *Journal of Dentistry Indonesia*, **28(1)**: 8-14
- Turner, J., Gittoes, N. and Selby, P., 2016, Society for Endocrinology Endocrine Emergency Guidance: Emergency management of acute hypocalcaemia in adult patients, *Endocrine Connections*, **5(5)**: G7-G8.
- UCL, 2010, *Hospitals Injectable Medicines Administration Guidline*, 3th, University Collage London Hospitals.



- Virani, S.S., Smith, S.C., Stone, N.J., and Grundy, S.M. 2020, Secondary Prevention for Atherosclerotic Cardiovascular Disease, *Circulation*, **141**:1121-1123
- Ward, N.C., Watts, G.F., and Eckel, R.H. 2019, Statin Toxicity, *Circulation Research*, **124**: 328-350
- WHO, Global Tuberculosis Report 2020, World Health Organization, 2020
- Wheatley, L.M., and Togias, A. 2015, Allergic Rhinitis, *The New England Journal of Medicine*, **372(5)**: 456-463
- Wilson, A.M. 2006, Antihistamines in Asthma Management, *Treat Respir Med*, **5(3)**: 149-158
- Woods, M., 2019, Risk Factors for the Development of Oedema and Lymphoedema, *British Journal of Nursing*, **28(4)**: 219-222.
- Xie, M., Burchfield, J.S., and Hill, J.A. 2014, Pathological Ventricular Remodeling: *Therapies*, *Circulation*, **128(9)**: 1021-1030
- Xu, X., Hu, J., Song, N., Chen, R., Zhang, T. and Ding, X., 2017, Hyperuricemia Increases the Risk of Acute Kidney Injury: A Systematic Review and Meta-Analysis, *BMC Nephrology*, **18(27)**: 1-14.
- Yang, H., Yoon, S., Kim, E. J., Seo, J. W., Koo, J. R., Oh, Y. K. Jo, Y. H., Kim, S., and Baek, S. H., 2022, Risk Factor for Overcorrection of Severe Hyponatremia: A *Post Hoc* Analysis of the SALSA Trial, *Kidney Research and Clinical Practice*, **41(3)**: 298-309.
- Yeh, D. D., Wilden, G. M., Cropano, C. and Chang, Y., Goal-Directed Diuresis: A Case-Control Study of Continuous Furosemid Infusion in Critically Ill Trauma Patients, *Journal of Emergency, Trauma, and Shock*, **8(1)**: 34-38.
- Zang, J., Liang, J., Zhuang, X., Zhang, S., Liao, X. and Wu, G., 2021, Intensive Blood Pressure Treatment in Coronary Artery Disease: Implications from the Systolic Blood Pressure Intervention Trial (SPRINT), *Journal of Human Hypertension*, **36**: 86-94.
- Zhang, Q., Ju, Y., Ma, Y. and Wang, T., 2018, N-acetylcysteine improves oxidative stress and inflammatory response in patients with community acquired pneumonia, *Medicine*, **97(45)**: 1-8.