



BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan Praktek Kerja Profesi Apoteker

Berdasarkan kegiatan Praktek Kerja Profesi Apoteker di RS Universitas Airlangga Surabaya, pada tanggal 1 Oktober sampai 30 November 2019, dapat disimpulkan bahwa:

1. Praktek Kerja Profesi Apoteker di RS Universitas Airlangga Surabaya mampu meningkatkan pemahaman calon apoteker tentang peran, fungsi, posisi dan tanggungjawab apoteker dalam pelayanan kefarmasian di Rumah Sakit.
2. Fungsi dan peran apoteker di RS Universitas Airlangga Surabaya dari segi manajerial adalah melakukan pemilihan, perencanaan, pengadaan, penerimaan, penyimpanan, pendistribusian, pengendalian, penarikan dan pemusnahan serta dokumentasi (administrasi) sediaan farmasi, alat kesehatan dan bahan medis habis pakai. Kemudian untuk pelayanan kefarmasian di RS Universitas Airlangga Surabaya meliputi pengkajian dan pelayanan resep, penelusuran riwayat penggunaan obat, rekonsiliasi obat, pelayanan informasi obat, konseling, visite, pemantauan terapi obat, monitoring efek samping obat, evaluasi penggunaan obat telah sesuai dengan Peraturan Menteri Kesehatan Republik Indonesia Nomor 72 Tahun 2016 tentang Standar Pelayanan Kefarmasian di Rumah Sakit.
3. Proses pengelolaan sediaan farmasi di RS Universitas Airlangga Surabaya menggunakan system satu pintu, yaitu sistem dimana semua sediaan farmasi, alat kesehatan dan bahan medis habis pakai yang di gunakan di RS Universitas Airlangga Surabaya dikelola oleh instalasi farmasi.

5.2 Saran Praktek Kerja Profesi Apoteker

Saran yang dapat diberikan setelah melaksanakan PKPA di Instalasi Farmasi Rumah Sakit Universitas Airlangga Surabaya, antara lain:

1. Rumah Sakit Universitas Airlangga Surabaya berkenan menambahkan waktu PKPA sehingga mahasiswa calon Apoteker dapat semakin memahami peran dan fungsi Apoteker di Rumah Sakit.
2. Kegiatan Farmasi Klinis di Instalasi Farmasi RS Universitas Airlangga Surabaya seperti yang tertera dalam dengan Peraturan Menteri Kesehatan Republik Indonesia Nomor 72



Tahun 2016 tentang Standar Pelayanan Kefarmasian di Rumah Sakit sangat beragam dan sudah berjalan dengan cukup baik. Untuk mengoptimalkan pelayanan farmasi klinis baik secara kualitas maupun kuantitas maka perlu dilakukan penambahan apoteker yang melaksanakan kegiatan farmasi klinis tersebut.



DAFTAR PUSTAKA

- Aaron Stern, Soumya S., Rohit K., Jasjit S., Sarthak S. 2014, High blood pressure in dialysis patients: cause, pathophysiology, influence on morbidity, mortality and management, *Journal of Clinical and Diagnostic Research*, **8**:6.
- Agarwal R., Nissenson A. R., Battle D., Coyne D. W., Trout J. R., Warnock D. G. 2003, Prevalence, treatment, and control of hypertension in chronic hemodialysis patients, *Am J Med*, **115**:291–297.
- Alsalmi, I., Al Rukhaimi, M., Al Sahow, A. 2016. Mineral bone disorder and its management among hemodialysis patients in the gulf cooperation council: initial findings from the dialysis outcomes and practice patterns study (2012–2015), *Saudi Journal of Kidney Diseases and Transplantation*, **27 (6 Suppl 1)**: 62-80.
- Amelia, A., Nugroho, A., dan Harijanto. 2016, Diagnosis and Management of Infections Caused by Enterobacteriaceae Producing Extended-Spectrum β -Lactamase. *The Indonesian Journal of Internal Medicine*, Indonesia.
- American College of Obstetricians and Gynecologists (ACOG), 2013, Hypertension in Pregnancy : Clasification Hypertensive Disorders, *Journal of The American College Obstreticians and Gynecologists*, **122 (15)** : 1121-1131.
- American Diabetes Association (ADA), (2015), Diagnosis and classification of diabetes mellitus, *American Diabetes Care*, **38** : 8-16.
- Anonim, 2011, Hemiplegia/Cerebrovascular Accident, *Physical and Occupational Therapy Clinical Practice Guidelines*, Landmark Healthcare, Inc.
- Astrini, Wan Gisca Ayu, 2013, ‘Hubungan Kadar Hemoglobin (Hb), Indeks Massa Tubuh (Imt) Dan Tekanan Darah Dengan Kualitas Hidup Pasien Gagal Ginjal Kronik Yang Menjalani Hemodialisis Di RSUD Dokter Soedarso Pontianak Bulan April 2013’, Universitas Tanjungpura Pontianak, Pontianak.
- Ayers Phil, *et al.* A.S.P.E.N, Parenteral Nutrition Handbook, 2nd ed. 2014, pp123.
- Badan POM Indonesia, 2017, *Informatorium Obat Nasional Indonesia cetakan tahun 2017*, Jakarta: Sagung Seto.
- BNF, 2011, *British National Formulary*, London: Royal Pharmaceutical Society.



- Bowman, ST *et al.* 2007 , ‘Clinical Research Hypertension : A Prospective Study of Cigarette Smokey And Risk of Inciden Hypertension In Bringham And Women Hospital Massachucetts’, Bringham, pp 1-3.
- Braz. J. Nephrol. 2019. ‘Review Article: Hypertension in patients on dialysis: diagnosis, mechanisms, and management’, *Federal University of Parana Brazil*, Brazil, **41(3):**400-411.
- Capsoni, N *et al.* 2019, Prevalence, Risk Factors and Outcomes of Patients Coming from the Community with Sepsis due to Multidrug Resistant Bacteria, *Multidisciplinary Respiratory Medicine*, Italy.
- DeCherney, A. H. & Nathan, L., 2003, *Current obstetric & gynecologic diagnosis & treatment*. Boston.
- Departemen Kesehatan RI, 2009, Pedoman pencampuran obat suntik. Jakarta: Direktorat Bina Farmasi Komunitas dan Klinik.
- DiPiro, J. T., Talbert, R. L., Yee, G. R., Wells, B. G., and Posey, L. M. 2008, *Pharmacotherapy: A Pathophysiologic Approach 6 th Edition*. USA: The McGrawHill companies, Inc
- Dipiro, J.T. Howdieshell, T.R., 2011, Intraabdominal Infections In Dipiro, J.T. Talbert R.L. Yee, G.C. *et al.*, eds. *Pharmacoteraphy: A Pathophysiologic Approach*. 8th ed. New York: McGraw-Hill.
- ESO Executive Committee dan ESO Writing Committee, 2008, *Guidelines for management of ischaemic stroke and transient ischaemic attack 2008*, Cerebrovascular Diseases (Basel, Switzerland), **25**: 457–507.
- Fagan, S.C., dan Hess, D.C., 2008, Stroke dalam Dipiro, J.T., Talbert, R.L., Yee, G.C., Matzke, G., Wells, B.C., & Posey, L.M., 2008, *Pharmacotherapy : A Pathophysiologic Approach*, seventh Edition, Appleton and Lange New York.
- Gerald, P. B. Manuel, V. Ronald, F. *et al.*, 1974. Pharmacology of Amikacin in Humans. *Antimicrob Agents Chemother.* **5(5)**:508-512.
- Goodman and Gilman, 2008, *Manual of Pharmacology and Therapeutics*, The Mc Graw Hill, USA.



- Gunawan SG dan Setiabudy R, eds. 2016, *Farmakologi dan Terapi*, Edisi 6, Jakarta: Badan penerbit FKUI.
- Guyton AC, 2008, *Fisiologi Manusia*, EGC, Jakarta
- Hasegawa, Takeshi; Koiwa, Fumihiko and Akizawa, Tadao, 2018, Anemia in conventional hemodialysis : Finding the optimal treatment balance, Showa University, Tokyo, Japan.
- Hauber, Brett; Caloyeras, John; Posner, Joshua; Brommage, Deborah; Tzivelekis, Spiros and Allan Pollock, 2017, Hemodialysis patients' preferences for the management of anemia, *BMC Nephrology*.
- Ivana Mikolasevic, Marta Žutelija, Vojko Mavrinac and Lidija Orlic. 2017, Dyslipidemia in patients with chronic kidney disease: etiology and management, *International Journal of Nephrology and Renovascular Disease* 2017. Department of Gastroenterology, Department of Nephrology, Dialysis and Kidney Transplantation, UHC Rijeka, School of Medicine, Rijeka, Croatia.
- James, P.A., Oapril, S., Carter, B.L., Cushman, W.C., Himmelfarb, C.D., andler, J., et al., 2014, Evidence-Based Guideline for the Management of High Blood Pressure in Adults Report From the Panel Members Appointed to the Eight Joint National Commite (JNC 8), *JAMA*.
- Jiang, Y., Li, J., Zhang, Y., Hu, X., Zhang, X., Shang, X., Gong, S., and Yu, R. 2019, Clinical Situations of Bacteriology and Prognosis in Patients with Urosepsis, *Biomed Research International*, China.
- Jitowiyono, Sugeng dan Weni Kristiyanasari, 2012, *Asuhan Keperawatan Post Operasi*, Yogyakarta: Nuha Medika.
- Junior, Wander Valadares de Oliveira, Ana Paula Ferreira Silvaa, Roberta Carvalho de Figueiredoa , Karina Braga Gomesb, Ana Cristina Simoes e Silvac, Luci Maria Sant'Ana Dusseb and Danyelle Romana Alves Riosa, 2019, Association between dyslipidemia and CCL2 in patients undergoing hemodialysis, *Cytokine* **125** (2020), pp 1-6.
- Kainz, Alexander; Mayer, Bernd; Kramar, Reinhard and Oberbauer, Rainer., 2010, Association of ESA Hypo-Resvonsiveness and Haemoglobin Variability with Mortality in Hemodialysis Patients. *Nephrol Dial Transplant Journal*, Germany, **34**.



- Kronenberg, F., Lingenhel, A., Neyer, U., Lhotta, K. Ko Nig, P., Auinger, M., *et al*, 2003, Prevalence of dyslipidemic risk factors in hemodialysis and CAPD patients, *Vienna: Kidney International*, **63**.
- Lewis, R. 2012, Mineral and bone disorders in chronic kidney disease: new insights into mechanism and management. *Annals of Clinical Biochemistry*, **49 (5)**, 432–440.
- Mc Evoy, G. K, 2011, *AHFS Drug Information*, Bethesda: American Society of Health System Pharmacists.
- Mozzaffarian, D. and Roger, V.L., 2014, Heart Disease and Stroke Statistic Update: A Report From The American Heart Association, *Circulation*.
- National Kidney Foundation, 2012, K/DOQI Clinical Practice Guidelines For Chronic Kidney Disease : Evaluation, Classification and Stratification. Kidney Disease Outcome Quality Initiative. *American Journal of Kidney Disease*, **39**: suppl 1.
- Pantelias, K and Grapsa, E. 2013, Chapter 17: Management of Anemia on Hemodialysis, InTech.
- Patel, B.J., Weinstein, M.P., and Polipous, G.M. 2017, *Screening and Confirmatory Test for ESBL in Performance Standards for Antimicrobial Susceptibility Testing*. Clinical and Laboratory Standard Institute.
- PERDOSSI, 2011, Pedoman Penatalaksanaan Stroke, Himpunan Dokter Spesialis Saraf Indonesia.
- POGI, 2016, Diagnosis dan tatalaksana pre-eklampsia. HKFM POGI.
- Pimentel, Ana, Pablo Uren a-Torres, M. Carola Zillikens, Jordi Bover and Martine Cohen-Solal. 2017. Fractures in patients with ckd diagnosis, treatment, and prevention: a review by Pramudianto A, Evaria. *Mims Indonesia petunjuk konsultasi edisi 18*, Jakarta: BIP.
- Pugh, D., Gallacher PJ, Dhaun N, 2019, Management Hypertension in Chronic kidney Disease, *BHF Centre for Cardiovascular Science, The Queen's Medical Research Institute*, University of Edinburgh. 47 Little France Crescent, Edinburgh, **79(4)**:365–379.
- Rasjad Chairuddin. 2007, Pengantar Ilmu Bedah Ortopedi, Edisi ketiga, Diterjemahkan oleh Yarsif Watampore, Jakarta, 355-357.



- Reddy, E., Suchitra, M., Reddy, V., Bitla, A and Rao, P., 2008, Dyslipidemia : End Stage Renal Disease and Hemodialysis, *Journal of Nephrology*.
- Reddy, Y. N. V., Abraham, G., Nagarajan, P., Matthew, M., Jayaseelan, T and Padma, G, 2014, Mineral bone disease in maintenance hemodialysis patients: Association with morbidity and mortality, *Indian Journal of Nephrology*, **24**:5.
- Reed, M. Parbadia, K. Cherian, J., 2012, Acute Bacterial Peritonitis in Adults, *Us. Pharm.* **37**(12):1-8.
- Salman, Muhammad; Khan, Amer Hayat; Adnan, Azreen Syazril; Sulaiman, Syed Azhar Syed; Hussain, Khalid; Shehzadi, Naureen; Islam, Muhammad; Jummaat, Fauziah, 2016, Prevalence and management of anemia in pre-dialysis Malaysian patients : A hospital-based study, School of Pharmaceutical Sciences, Universiti Sains Malaysia.
- Solomkin, J.S . Mazuski, J.E. Bradley, J.S. *et al.* 2010, Diagnosis and Management of Complicated intra-abdominal infection in adults and children: Guidelines by the Surgical Infection Society and the Infectious Disease Society of America. *Clin Infect Dis.* **50**: 133-164.
- Suhardjono, 2009, Kelainan kardiovaskular pada penyakit ginjal kronik, Jakarta: Jurnal Penyakit Dalam, hlm.35-9.
- Sukandar E, 2006, Nefrologi klinik, Edisi ke-3, Bandung: Fakultas Kedokteran Universitas Padjadjaran.
- Sweetman SC, 2009, Martindale: The Complete Drug Reference, 37th Edition, The Pharmaceutical Press, British, p 49.
- Taniyama, Yoshihiro. 2016. Management of hypertension for patients undergoing dialysis therapy, *Renal Replacement Therapy*, 2 (21).
- Trissel, Lawrence A, 2018, Handbook On Injectable Drugs ed 17th, American Society Of Health System Pharmacists.
- Wang, C. H., Tsai, J. P., Lai, Y. H., Lin, Y. L., Kuo, C. H., HSU, B. G., 2016, Inverse relationship of bone mineral density and serum level of N-terminal pro-B-type natriuretic peptide in peritoneal dialysis patients, *Tzu Chi Medical Journal*, **28** (2):68-72.



- Wiknojosastro, H., Saifuddin, A. B. dan Rachimhadhi, T. 2009, *Ilmu kandungan*, Jakarta: PT Bina Pustaka Sarwono Prawirohardjo.
- Yamamoto, S., Karaboyas, A., Komaba, H. 2018, Mineral and bone disorder management in hemodialysis patients: Comparing PTH control practices in Japan with Europe and North America: The dialysis outcomes and practice pattern study, *Journal of BMC Nephrology*, **19**:253.
- Zhao, J., Zhang, X., Dong, L., Wen, Y and Cui, L., 2014, The Many Roles of Statin in Ischemic Stroke, *Curr Neuroparmacol*, **12(6)**: 564–574.