

BAB 6

KESIMPULAN DAN SARAN

6.1. Kesimpulan

Berdasarkan hasil penelitian yang telah dilakukan maka dapat diambil kesimpulan sebagai berikut :

1. Efektivitas penggunaan lisinopril menurunkan tekanan darah sebesar 20,8/11,2 mmHg dibandingkan captoril sebesar 15,6/6,4 mmHg. Hasil pengukuran kualitas hidup menunjukkan tidak terdapat perbedaan yang bermakna terhadap kualitas hidup pada kelompok terapi lisinopril dan captoril.
2. Biaya rata-rata terapi menggunakan lisinopril sebesar Rp 14.171,4 per bulan dibandingkan captoril sebesar Rp 4.460,4 per bulan.
3. Terapi dengan lisinopril lebih *cost-effective* dibandingkan captoril dengan nilai ACER pada tekanan darah sistolik sebesar Rp 681,31 dan tekanan darah diastolik sebesar Rp 1.265,30.

6.2. Saran

1. Diharapkan dapat dilakukan penelitian menggunakan metode yang sama. Namun dengan jumlah sampel yang lebih banyak dan komponen biaya dari prespektif atau sudut pandang yang berbeda.
2. Diharapkan dilakukan penelitian dengan menggunakan subyek penelitian pasien rawat inap dengan komplikasi penyakit lainnya.

DAFTAR PUSTAKA

- Abdulganiyu, G., and Fola, T., 2014, What Is The Cost Of Illness Of Type II Diabetes Mellitus In A Developing Economy?, *International Journal of Pharmacy and Pharmaceutical Sciences*, **6**: 927-931.
- Andayani, T.M. 2013, *Farmakoeconomis Prinsip dan Metodologi*. Bursa Ilmu, Yogyakarta.
- Ansa, A.D., Goenawi, L.R., Tjitrosantoso, H.M., 2012, *Kajian Penggunaan Obat Antihipertensi Pada Pasien Diabetes Melitus Tipe 2 Di Instalasi Rawat Inap BLU RSUP PROF.DR.R.D. Kandou Manado Periode Januari-Desember 2010*. Program Studi Farmasi FMIPA UNSRAT Manado.
- Arsono, S. 2005, ‘Diabetes Melitus Sebagai Faktor Risiko Kejadian Gagal Ginjal Terminal’, *Tesis*, Sarjana Farmasi, Universitas Diponegoro, Semarang.
- Ascobat. G., dan Mardiaty, N., 1996, *Analisis Biaya Rumah Sakit*, Disajikan pada pelatihan penyusunan pola tarif rumah sakit pemerintah di lingkungan dirjen pelayanan medik tahun anggaran 1996/1997.
- Badan Penelitian Dan Pengembangan Kesehatan Kementerian Kesehatan RI, 2013, *Riset Kesehatan Dasar (Riskesdas,2013)*, Jakarta: Kementerian Kesehatan Republik Indonesia.
- Berger, M.L., Bingefors, K., Hedblom, E., Pashos, C.L., Torrance, G., Smith, M.D., 2003, Health Care Cost, Quality, and Outcomes : ISPOR Book of Terms, ISPOR: USA.
- Bootman J.L, Townsend R.J, McGhan WF. *Principles of Pharmacoeconomics*. 3nd Ed. Harvey Whitney Books Company, Cincinnati, 2005.

British National Formulary (BNF) 54, 2007, Published jointly by the BMJ Publishing Group Ltd and RPS Publishing.

Cernes, R and Zimlichman, R. 2013, *Diabetes Melitus Type 2 and Proteinuria*. Diakses pada 8 Desember 2014, <http://dx.doi.org/10.5772/56434>.

Chiarelli, F and Macovecchio, M.L, 2013. Oral Presentation: The Molecular mechanisms underlying diabetic complications. *International Journal Of Pediatric Endocrinology*.Departement of Pediatrics, University of Chieti, Italy.

Chie, H.H dan Zuraida, R., 2013. ‘Skala Pengukuran Shift Kerja, Beban Kerja, dan Persepsi Kesehatan Sebagai Stressor dengan Fasilitas Manajemen untuk Penanggulangannya’. Industrial Engineering Departement, Faculty of Engineering, Binus University.Jakarta Barat.

Chik, Z., Deril, NM., Didi, EMH., Basu, RC., Ratnasingam, J., and Mohamed, Z., 2014, ‘Bioequivalence & Bioavailability’ Univerity of Malaysia Bioequivalence and Testing Centre. *A Bioequivalence Comparison of Two Captopril Formulatinons (25 mg Tablets); An Open-Label, Randomized, Two-Treatment, Two-Way Crossover Study in Healthy Volunteers*, Malaysia, Kuala Lumpur.

Consumer Reports Health Buy Drugs, 2011. Using ACE Inhibitors to treat: *High Blood Pressure and Heart Disease*, Comparing Effectiveness, Safety, and Price.

Corwin, E.J. 2009, *Patofisiologi*. EGC, Jakarta.

Darnindro, N.,dan Muthalib, A., 2008, Tatalaksana Hipertensi Pasien dengan Sindrom Nefrotik, *Majalah Kedokteran Indonesia*, **58(2)**:57-61

Davis S. N., 2007., *Case Study,’Patient With New-Onset Type 2 Diabetes* 67

Melitus', University of Tennessee Advanced Studies in Pharmacy, (4):6.

Departemen Kesehatan RI, 2005, *Pharmaceutical Care Untuk Penyakit Diabetes Melitus*, Direktorat Bina Farmasi Komunitas dan Klinik Ditjen Bina Kefarmasian dan Alat Kesehatan Departemen Kesehatan, Jakarta, 28-31.

Departemen Kesehatan RI, 2006, *Pharmaceutical Care Untuk Penyakit Hipertensi*, Direktorat Bina Farmasi Komunitas dan Klinik Ditjen Bina Kefarmasian dan Alat Kesehatan Departemen Kesehatan, Jakarta, 12-56.

Diabetes Care, 2015.,*The Journal Of Clinical And Applied Research And Education*, 'Standards Of Medical Care In Diabetes 2015' American Diabetes Association.

Dipiro, J., Talbert, R.L., Yee, G.C., Matzke , G.R., Wells, B.G., Posey, L.M., 2005, *Pharmacotherapy a Patophysiologic Approach*, The Mc Graw Hill Companies, United States.

Dipiro, J., Talbert, R.L., Yee, G.C., Matzke , G.R., Wells, B.G., Posey, L.M., 2008, *Pharmacotherapy a Patophysiologic Approach*, The Mc Graw Hill Companies, United States, 170-195.

Ganong, W.F., 2006. *Review of Medical Physiology*. 22nd ed. USA: McGraw Hill Companies.

Grosse D.S. and Teutsch S.M., *Developing, Implementing an Population Intervention, Genetics and Prevention Effectiveness*, 200, Genetics and Publics Health in21st century, Oxford University Press, p 235-378.

Harman, I., and Boehm, MD., 2004, Treatment for Diabetic Nephropathy: Angiotensin Reseptor Blockers Preferred to Angiotensin-Converting Enzyme Inhibitors, *IMAJ*, **6**: 296-298.

- Hoffman, Brian B. 2006, "Therapy of Hypertension", in Goodman and Gilman's *The Pharmacological Basic of Therapeutics*, 11th ed., McGraw-Hill, New York.
- Immanuel S, 2006. Pemeriksaan laboratorium penyulit diabetes melitus. Pendidikan Berkesinambungan Patologi Klinik. Bagian Patologi Klinik FKUI. Jakarta hal 18-36.
- Jackson, 2012, 'Diuretik' in Goodman and Gilman *Dasar Farmakologi Terapi*, Vol.2, 10th ed., Penerbit Buku Kedokteran, Jakarta.
- Kementerian Kesehatan Republik Indonesia, 2013, Pedoman Penerapan Kajian Farmakoekonomi, Jakarta: Kementerian Kesehatan Republik Indonesia.
- Lacy, C.F., Armstrong, L.L., Goldman, M.P., Lance, L.L., 2008, Drug Information Handbook '*A Comprehensive Resource for all Clinicians and Healthcare Professionals*', 17th ed, American Pharmacist Association, USA.
- Lacourciere, Y., Nadeau, A., Poirier, L., Tancrede, G., 2015., *Three Years Analysis. Captopril or Conventional Therapy in Hypertensive Type II Diabetics*. Centre Hospitalier de l'Universite Laval, Quebec, Canada.
- Lestari, U., Darwin, D., dan Estiana, L., 2011, Pola Pengobatan Pada Pasien Hipertensi Dengan Diabetes Melitus Tipe 2 Di RSUD Raden Mattaher Jambi, *Jurnal Sains dan Teknologi Farmasi*, 16(2): 189-196.
- Lovell, HG. 1999. *Angiotensin Converting Enzyme Inhibitors In Normotensive Diabetic Patients With Microalbuminuria*. Chichester, UK: John Wiley & Sons, Ltd.
- McEvoy, G.K. 2011, *AHFS Drug Information*, American Society of Health-System Pharmacists, Bethesda, Maryland.

- Mogensen, C.E., Neldam S., Tikkanen I., et al. 2001. *Outcomes Research In Review*, ‘New Treatment Options Diabetic Patients With Hypertension and Microalbuminuria. (8):2.JCOM
- Nayak, A.S., Jain, A., Rathore, P., Sumbhate, Sandip., Nayak, S., 2009., A comparative Release Study Of Lisinopril From Different Vehicles, International Journal of Pharmacy and Pharmaceutical Sciences., Bansal College of Pharmacy, India.
- Njoto E. N., 2014, *Analisis*, ‘Target Tekanan Darah pada Diabetes Melitus’.,Eagle HEAD Medical Centre, Surabaya, Indonesia.(41):11.
- Notoatmodjo, S., 2012, *Metodologi Penelitian Kesehatan*, Rineka Cipta, Jakarta, 100-218.
- Nugroho W.,2006.*Keperawatan Gerontik*. Edisi 2. Jakarta: EGC.
- Oates and Brown, 2012, ‘Hipertensi’ in Goodman and Gilman., *Dasar Farmakologi Terapi*, Vol.2, 10th ed., Penerbit Buku Kedokteran, Jakarta.
- Okudawa S.I.R., Umar A., Ibrahim., S.,Bello F., 2013.*Journal of Diabetology*.’Relationship of oxidate stress with type 2 diabetes and hypertension’.Departement of Biochemistry, Ahmadu Bello University, Zaria,Nigeria.
- Orion, 1997, *Pharmacoeconomics Primer and Guide Introduction to Economic Evaluation*, Hoesch Marion Rousell Incorporation, Virgina.
- Peraturan Menteri Kesehatan Republik Indonesia, 2013, *Pelayanan Kesehatan Pada Jaminan Kesehatan Nasional*. Jakarta.
- Permana, H. 2008, *Pengelolaan Hipertensi pada Diabetes Melitus Tipe 2*, Fakultas Kedokteran Universitas Padjadjaran, Bandung.
- Perwitasari, DA., 2012. Development the validation of Indonesian version of SF-36 questionairre in cancer disease. Indonesian J. Pharm, 23(4):

248-253.

- Purnamasari, D. 2009, 'Diagnosis dan Klasifikasi Diabetes Melitus' in Sudoyo, Aru W, Setiyohadi,B, Alwi,I, Simadibrata, M, Setiati, S, *Buku Ajar : Ilmu Penyakit Dalam*, 5th ed., Internal Publishing, Diponegoro 71 Jakarta Pusat, 2009.
- Rindiastuti, Y. 2008, *Nefropati Diabetik*, Fakultas Kedokteran UNS.
- Rahajeng, E. dan Tuminah, S., 2009, 'Prevalensi Hipertensi dan Determinannya di Indonesia', *Artikel Penelitian*, 2.
- Ramos-Nino, M.E and Blumen, S.R., 2009, Clinical Medicine: Therapeutics 'Benefits of ACE Inhibitors in Diabetes', Libertas Academia.
- Rascati, K.L., et al, 2009, *Essentials of Pharmacoeconomics*, Lippincott Williams & Wilkies, Philadelphia.
- Ritz E, Keller C, Kristian H.B., 2000, 'Nephropathy Of Type II Diabetes Mellitus'. Nephrol Dial Transplant,38-44.
- Ryden, L., Armstrong, W., Cleland, J.G.F., Horowitz, J.D., Massie, B.M., Packer, M., and Poole-Wilson, P.A., 2000, Efficacy and Safety of High-Dose Lisinopril in Chronic Heart Failure Patients at High Cardiovascular Risk, Including Those With Diabetes Mellitus, *European Heart Journal*, **21**: 1967-1978.
- Sampanis, C and Zamboulis, C, 2008, 'Arterial hypertension in diabetes mellitus: from theory to clinical practice', Aristotle University of Thessaloniki, Greece.
- Shaker, J., & Barnett, A.H., 2004, Diabetes, Obesity and Cardiovaskuler Disease-Therapeutic Implications., in Barnet A.H. & Kumar, S., ed. *Obesity & Diabetes*. USA: John Wiley & Sons.
- Sunaryanto, A., 2010, Tinjauan kasus, *Penatalaksanaan Penderita Dengan Diabetik Nephropathy*, Fakultas Kedokteran Universitas Udayana,

Denpasar.

- Supriyanto S., Pudjiraharjo W.J., Damayanti N.A., Rohmah T.N., Chalidiyanto, D., 1998, *Analisis Biaya Satuan dan Penyesuaian Tarif Pelayanan Puskesmas*, Bagian AKM-FKM Unair.
- Sowers, J.R., Epstein, M., and Frohlich, E., 2001, Diabetes, Hypertension and Cardiovascular: An Update. *Journal of American Heart Asociation*.37:1053-1059
- Sweetman *et al.* 2009. Martindale: The Complete Drug Reference '36th ed. *The Pharmaceutical Pres*, London.
- Tedjakusumana, P. 2012, 'Tata Laksana Hipertensi', *CDK-192*, **39(4)**: 251-254
- The Seventh Report of the *Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure*, 2004, 11-12.
- Vogenberg R.F., 2001, Introduction to Applied Pharmacoeconomics, McGraw-ill Companies, USA, p. 256-257.
- Weinberg *et al*, 2003, *How High Should an ACE Inhibitor or Angiotensin Receptor Blocker Be Dosed in Patients with Diabetic Nephropathy ?*. Hypertension Clinical Research Center, Rush-Presbyterian-St. Luke's. Chicago.