

DAFTAR PUSTAKA

1. Kemenkes RI. Tuberkulosis Temukan Obati Sampai Sembuh. Infodatin. [Internet].2015.[cited 2015 Nov 25].Available from: http://www.depkes.go.id/download.php?file=download/pusdatin/infodatin/infodatin_tb.pdf.
2. Centers for Disease Control and Prevention. CDC | TB | Data and Statistics. [Internet].2012.[Updated 2014; cited 2015 Nov 29].Available from: <http://www.cdc.gov/tb/statistics/default.htm>. Published 2012. Accessed November 29, 2015.
3. World Health Organization.Global Tuberculosis Report 2015.Glob Tuberc Rep 20th Ed.[Internet].2015.[cited 2015 Nov 25].Available from: http://apps.who.int/iris/bitstream/10665/191102/1/9789241565059_eng.pdf
4. World Health Organization. Stop TB Partnership : The global plan to stop TB 2011-2015: transforming the fight towards elimination of tuberculosis. Geneva World Health Organization.[Internet].2010.[cited 2015 Nov 26]; 2010:101. doi:1098/rsif.2010.0072.
5. Kementerian Kesehatan RI. Strategi Nasional Pengendalian TB di Indonesia 2010-2014.[Internet].2011.[cited 2015 Nov 25].2011:1-70. Available from: http://www.searo.who.int/indonesia/topics/tb/stranas_tb-2010-2014.pdf.
6. Xia YY, Hu DY, Liu FY, Wang XM, Yuan YL, Tu DH, et al. Design of the anti-tuberculosis drugs induced adverse reactions in China National Tuberculosis Prevention and Control Scheme Study (ADACS). BMC Public Health. 2010;10(Cdc):267
7. Castro AT, Mendes M, Freitas S, Roxo PC. Incidence and risk factors of major toxicity associated to first-line antituberculosis drugs for latent and active tuberculosis during a period of 10 years. Revista Portuguesa de Pneumologia English Edition. 2015;21(3):144-50.

8. Forson A, Kudzawu S, Kwara A, Flanigan T. High Frequency of First-Line Anti-Tuberculosis Drug Resistance Among Persons With Chronic Pulmonary Tuberculosis At a Teaching Hospital Chest Clinic. 2010;44(2).
9. Lai HM, Mazlan NA, Yusoff SM, Harun SN, Wee LJ, Thambrin FM. Management of Side Effects and Drug Interactions of Anti-mycobacterial in Tuberculosis Management of Side Effects and Drug Interactions of Anti-mycobacterial in Tuberculosis. WebmedCentral Infect Dis.[Internet].2011.[cited 2015 Nov 29].2011;2(12):1-9. Available from: Webmed Central
10. Arbex MA, Varella MDCL, Siqueira HR De, Mello FAF De. Antituberculosis drugs: Drug interactions, adverse effects, and use in special situations. Part 1: First-line drugs. Journal Brasileiro de Pneumologia. 2010;36(June):626-40.
11. Farazi A, Sofian M, Jabbariasl M, Keshavarz S. Adverse reactions to antituberculosis drugs in Iranian tuberculosis patients. Tuberculosis Respiratory Treatment. 2014;2014:412893.
12. World Health Organization. WHO: TB comorbidities and risk factors.[Internet].2014.[cited 2015 Des 1].Available from: <http://www.who.int/tb/areas-of-work/treatment/risk-factors/en/>. Published 2014. Accessed November 29, 2015.
13. Centers for Disease Control and Prevention. CDC Health Disparities and Inequalities Report — United States.[Internet].2013.[cited 2015 Des 1] 2013;62(3).Available from: www.cdc.gov/mmwr/pdf/other/su6203.pdf
14. Bates M, Marais BJ, Zumla A. Tuberculosis Comorbidity with Communicable and Noncommunicable Diseases. Cold Spring Harb Perspect Med. 2015:1-16..
15. Rao VK. The Impact of Comorbidity on Mortality Following In-hospital Diagnosis of Tuberculosis. CHEST J. 1998;114(5):1244.

16. H. Chantaphakul , W. Cheungpasitporn KR, Klaewsongkram J. Abstracts. Advers React to Anti-tuberculosis drugs.[Internet].2011[cited 2015 3 Des 2015].Available from: Allergic Imunologi Journal
17. Kikvidze M, Ikiashvili L. Comorbidities and MDR-TB treatment outcomes in Georgia- 2009-11 cohort. European Respiratory Journal.[Internet].2014[cited 2015 Des 4].2014;44(Suppl 58).Available from: http://erj.ersjournals.com/content/44/Suppl_58/P1444.abstract.
18. Direktorat Jendral Pengendalian Penyakit dan Penyehatan Lingkungan. Pedoman Nasional Pengendalian Tuberkulosis. In: Katalog Dalam Terbitan : Kementerian Kesehatan Nasional.[Internet].2014.[cited 2015 Des 4].Jakarta: Kementrian Kesehatan RI; 2014:1-210.
19. Almeida Da Silva PE, Palomino JC. Molecular basis and mechanisms of drug resistance in Mycobacterium tuberculosis: classical and new drugs. Journal Antimicrobial Chemotherapy. 2011;66(7):1417-30.
20. Jena L, Waghmare P, Kashikar S, Kumar S, Harinath BC. Computational approach to understanding the mechanism of action of isoniazid, an anti-TB drug. International Journal of Mycobacteriology. 2014;3(4):276-82.
21. Somasundaram S, Ram A, Sankaranarayanan L. Isoniazid and Rifampicin as Therapeutic Regimen in the Current Era: A Review. Journal of Tuberculosis Research. 2014;02(March):40-51.
22. Soo Hui L, Lee Cheng H, Loong Hui T, Mohamad N, Yazid A, Lay Harn G. Antituberculosis.Webmed Central Pharmaceutical Sciences .[Internet].2011.[cited 2015 Des 4]. 2011;2(12):1-13.Available from: Webmed Central
23. Palomino J, Martin A. Drug Resistance Mechanisms in Mycobacterium tuberculosis. Antibiotics. 2014;3(3):317-40.

24. Kolyva A, Karakousis P. Old and new TB drugs: Mechanisms of action and resistance. In: Cardona P-J, ed. *Understanding Tuberculosis - New Approaches to Fighting Against Drug Resistance*. InTech.[Internet].2012.[cited 2015 Des 6].2012:210-232. Available from :http://cdn.intechopen.com/pdfs/28840/InTech-Old_and_new_tb_drugs_mechanisms_of_action_and_resistance.pdf.
25. Pang Y, Lu J, Wang Y, Song Y, Wang S, Zhao Y. Study of the rifampin monoresistance mechanism in *Mycobacterium tuberculosis*. *Antimicrobial Agents Chemotherapy*. 2013;57(2):893-900.
26. Rafiq S, Iqbal T, Jamil A, Khan HF. Pharmacokinetic studies of indoprofen in healthy volunteers and in patients. *International Journal of Agriculture & Biology*. [Internet].2010.[cited 2015 Des 7].2010;12(3):391-5. Available from:<http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L8175583>.
27. EMA European Medicines Agency. Assessment report, Anti-tuberculosis medicinal products containing isoniazid, rifampicin, pyrazinamide, ethambutol, rifabutin: posology in children. 2012;5(726):227191.
28. Zhang Y, Shi W, Zhang W, Mitchison D. Mechanisms of Pyrazinamide Action and Resistance. *Microbiology Spectrum*. 2014;1952(2):1-12..
29. Gumbo T, Siyambalapitiyage Dona CSW, Meek C, Leff R. Pharmacokinetics-Pharmacodynamics of Pyrazinamide in a Novel In Vitro Model of Tuberculosis for Sterilizing Effect: a Paradigm for Faster Assessment of New Antituberculosis Drugs. *Antimicrobial Agents and Chemotherapy*. 2009;53(8):3197-204.
30. Kolita B, Gogoi D, Dutta PP, Bordoloi M, Bezbaruah RL. Arabinosyl transferase inhibitor design against *Mycobacterium tuberculosis* using ligand based drug design approach. *Bangladesh Journal of Pharmacology*. 2014;9(2):225-9.

31. Koegelenberg CFN, Nortje A, Lalla U, Enslin A, Irusen EM, Rosenkranz B, et al. The pharmacokinetics of enteral antituberculosis drugs in patients requiring intensive care. *South Africa Medical Journal*. 2013;103(6):394-8.
32. World Health Organization. Treatment of tuberculosis. In: WHO Library Cataloguing-in-Publication Data. 4th ed.[Internet].2010.[cited 2015 Des 20] 2010:160. Available from : World Health Organization
33. Resende LSO, Dos Santos-Neto ET. Risk factors associated with adverse reactions to antituberculosis drugs. *Journal Brasileiro de Pneumologia*. 2015;41(1):77-89.
34. American Thoracic Society/Centers for Disease Control/Infectious Diseases Society of America. Treatment of tuberculosis,. *MMWR: Morbidity and Mortality Weekly report Recommendation and Reports*., 2003;52:1-77.
35. Kass J, Shandera W. Nervous sytem effects of antituberculosis therapy. 2010;24(8):655-667.
36. Yakar F, Yildiz N, Yakar A, K\il\içaslan Z. Isoniazid- and rifampicin-induced thrombocytopenia. *Multidisciplinary Respiratory Medicine*. 2013;8(1):1-3.
37. Gholami K, Kamali E, Mi SH. Evaluation of anti-tuberculosis induced adverse reactions in hospitalized patients. *Pharmacy Practice (Granada)*.[Internet].[cited 2015 Des 30]. 2006;4(3):134-8. Available from: http://scielo.isciii.es/pdf/pharmacy/v4n3/en_original5.pdf.
38. Kortenbout W, Mtshali N, van Dyk A, van Wyk MC, Basson PM, Leech R et al. Bacterial Diseases. In: Vilijoen M, ed. *Communicale Diseases in Southern Africa*. ; 2011:289.
39. Ramappa V, Aithal GP. Hepatotoxicity Related to Anti-tuberculosis Drugs: Mechanisms and Management. *Journal of Clinical and Experimental Hepatology*. 2013;3(1):37-49.

40. Lehloenya RJ, Dheda K. Cutaneous adverse drug reactions to anti-tuberculosis drugs: state of the art and into the future. *Expert Review Anti Infective Therapy*. 2012;10:475-86.
41. Curry International Tuberculosis Center. Adverse Reactions: Chapter 7. *Drug-Resistant Tuberculosis A Survival Guide for Clinicians*. Second Ed. 2011:145-70.
42. Chang CH, Chen YF, Wu VC, Shu CC, Lee CH, Wang JY, et al. Acute kidney injury due to anti-tuberculosis drugs: a five-year experience in an aging population. *BMC Infectious Disease*. 2014;14:23.
43. Sharma P, Sharma R. Toxic optic neuropathy. *Indian Journal of Ophthalmol*. 2011;59(2):137-41.
44. Huth ME, Ricci AJ, Cheng AG. Mechanisms of Aminoglycoside Ototoxicity and Targets of Hair Cell Protection. *International Journal of Otolaryngology*. 2011;2011:1-19.
45. Plas H, Mendelson M. High prevalence of comorbidity and need for up-referral among inpatients at a district-level hospital with specialist tuberculosis services in South Africa - The need for specialist support. *South African Medical Journal*. 2011;101(8):529-32.
46. Kang YA. Tuberculosis treatment in patients with comorbidities. *Tuberculosis Respiratory Disease (Seoul)*. 2014;76(6):257-60.
47. Marks DJB, Dheda K, Dawson R, Ainslie G, Miller RF. Adverse events to antituberculosis therapy: influence of HIV and antiretroviral drugs. *International Journal of STD and AIDS*. 2009;20(5):339-345.
48. Vasakova M. Challenges of antituberculosis treatment in patients with difficult clinical conditions. *Clinical Respiratory Journal*. 2015;9(2):143-52
49. Mimi N, Medregoniu D, Olteanu M, Golli A, Olteanu M, Maceseanu A, et al. For Practitioner Tuberculosis and Chronic Renal Failure; Therapy


- Patterns. 2011;37(2):106-8.
50. Baslaim MM, Al-Ghamdi MA, Al-Numani TS, Ashour AS, Al-Amoudi SA. Tuberculosis in 7 Breast Cancer Cases: Diagnostic and Therapeutic Challenges. *Mycobacterium Disease*. 2013;3(3).
 51. Subramanian AK, Morris MI. Mycobacterium tuberculosis infections in solid organ transplantation. *American Journal of Transplantation*. 2013;13(SUPPL.4):68-76.
 52. Lee AM, Mennone JZ, Jones RC, Paul WS. Risk factors for hepatotoxicity associated with rifampin and pyrazinamide for the treatment of latent tuberculosis infection : experience from three public health tuberculosis clinics. 2002;6(April):995-1000.
 53. Ai X, Men K, Guo L, Zhang T, Zhao Y, Sun X et al. Factors associated with low cure rate of tuberculosis in remote poor areas of Shaanxi Province , China : a case control study. *BMC Public Health* 2010;10:112
 54. Kunst H, Khan KS. Age-related risk of hepatotoxicity in the treatment of latent tuberculosis infection : a systematic review. *International Journal of Tuberculosis and Lung Disease*. 2010;14(11):1374-81.
 55. Chung-delgado K, Revilla-montag A, Guillen-bravo S, Velez-Segovia E, Soria-Montoya A, Nunez-Garbin A, et al. Factors associated with anti-tuberculosis medication adverse effects : a case-control study in Lima , Peru. 2011;6(11):1-5
 56. Ali AH, Belachew T, Yami A, Ayen WY. Anti-tuberculosis drug induced hepatotoxicity among TB / HIV co-infected patients at Jimma University Hospital , Ethiopia : Nested case-control study. 2013;8(5).
 57. Martínez Alfaro E, Cuadra F, Solera J, Maciá M, Geijo P, Sánchez Martínez PA, et al. Evaluation of 2 tuberculosis chemoprophylaxis regimens in patients infected with human immunodeficiency virus. The GECMEI Group.

Med Clin. 2000;115(5):161-5


58. Kim SY, Lee S, Yim J, Yoo CG, Kim YW, Han SK, et al. Treatment response and adverse reactions in older tuberculosis patients with immunocompromising comorbidities. Division of Pulmonary and Critical care Medicine. Departemen of Internal Medicine and Lung Institue of Medical Research Center.2013;54(5):1227-33.
59. Dooley KE, Chalsson RE. Tuberculosis and diabetes mellitus : convergence of two epidemics. Division of Infectious Diseases and Center for Tuberculosis Research. *Lancet Infectious Disease.* 2010;9(12):737-46.
60. Baghaei P, Marjani M, Javanmard P, Tabarsi P, Masjedi MR. Diabetes mellitus and tuberculosis facts and controversies. *Journal of Diabetes and Metabolic Disorders.* 2013:1-8.
61. Mo P, Zhu Q, Teter C, Yang R, Deng L, Yan Y, et al. International Journal of Infectious Diseases Prevalence , drug-induced hepatotoxicity , and mortality among patients multi-infected with HIV , tuberculosis , and hepatitis virus. *Int J Infect Dis.* 2014;28:95-100
62. Kim DK, Lee SW, Yoo C, Kim YW, Han SK, Shim YS, et al. Clinical characteristics and treatment responses of tuberculosis in patients with malignancy receiving anticancer chemotherapy. *Chest.* 2004;128(4):2218-22.

LAMPIRAN


1. Ethical Clearance

	<p style="text-align: center;">KOMISI ETIK PENELITIAN KESEHATAN (KEPK) FAKULTAS KEDOKTERAN UNIVERSITAS DIPONEGORO DAN RSUP dr KARIADI SEMARANG Sekretariat : Kantor Dekanat FK Undip Lt.3 Jl. Dr. Soetomo 18. Semarang Telp/Fax. 024-8318350</p>	
<h3>ETHICAL CLEARANCE</h3> <p>No. 236/EC/FK-RSDK/2016</p>		
<p>Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Diponegoro-RSUP. Dr. Kariadi Semarang, setelah membaca dan menelaah Usulan Penelitian dengan judul :</p>		
<p>POLA DISTRIBUSI PENYAKIT KOMORBID DAN KEJADIAN EFEK SAMPING OAT PADA PASIEN TUBERKULOSIS DI RSUP DR. KARIADI</p>		
<p>Peneliti Utama : <i>Ivona Oliviera</i></p>		
<p>Pembimbing : 1. dr. Fathur Nur Kholis, Sp.PD 2. dr. Dwi Ngestiningsih, M.Kes, Sp.PD</p>		
<p>Penelitian : Dilaksanakan di Instalasi Rekam Medik RSUP Dr. Kariadi Semarang</p>		
<p>Setuju untuk dilaksanakan, dengan memperhatikan prinsip-prinsip yang dinyatakan dalam Deklarasi Helsinki 1975, yang diamended di Seoul 2008 dan Pedoman Nasional Etik Penelitian Kesehatan (PNEPK) Departemen Kesehatan RI 2011</p>		
<p>Penelitian ini adalah Rekam Medik, jadi tidak memerlukan Informed Consent. Peneliti diwajibkan menyerahkan :</p>		
<ul style="list-style-type: none"> - Laporan kemajuan penelitian (<i>clinical trial</i>) ✓ Laporan kejadian efek samping jika ada ✓ Laporan ke KEPK jika penelitian sudah selesai & dilampiri Abstrak Penelitian 		
<p>Semarang, 15 MAR 2016</p>		
<p>Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Undip-RS. Dr. Kariadi</p> <p style="text-align: center;">Ketua</p>  <p style="text-align: center;">Prof. Dr. dr. Suprihati, M.Sc, Sp.THT-KL(K) NIP. 19500621 197703 2 001</p>		

2. Surat Izin Penelitian



KEMENTERIAN KESEHATAN RI
DIREKTORAT JENDERAL BINA UPAYA KESEHATAN
RUMAH SAKIT UMUM PUSAT DOKTER KARIADI
 Jl. Dr. Sutomo No. 16 Semarang, PO Box 1104
 Telepon : (024) 8413993, 8413476, 8413764 Fax : (024) 8318617
 Website : <http://www.rskariadi.co.id> email : humas_rskariadi@yahoo.co.id, rsdk@indosat.net.id



RSUP Dr. KARIADI
 Sehat Memayu Sehat

Nomor : DL.00.02 / 1.11 / 1157 / 2016
 Lamp. : -
 Perihal : Penelitian

31 MAR 2016

Yth. **Dekan Fakultas Kedokteran**
 Universitas Diponegoro
 Jl. Prof. H. Soedarto, SH - Tembalang
 di -
 SEMARANG

Menindak lanjuti surat Saudara No. 1395/UN7.3.4/D1/PP/2016 tanggal 23 Februari 2016 perihal Permohonan ijin penelitian, dengan ini kami sampaikan bahwa :


Nama peneliti : Ivona Oliviera
 Institusi peneliti : Prodi Sarjana Kedokteran Fakultas Kedokteran UNDIP
 Judul penelitian : Pola Distribusi Penyakit Komorbid Dan Kejadian Efek Samping OAT Pada Pasien Tuberkulosis Di RSUP Dr. Kariadi

Pada prinsipnya diizinkan untuk melaksanakan Penelitian di Instalasi Rekam Medis RSUP Dr. Kariadi dengan ketentuan :

- ✦ Waktu pelaksanaan penelitian dapat dilakukan sewaktu hari kerja selama ± 2 bulan, dengan jumlah sampel yang dibutuhkan adalah semua pasien tuberkulosis yang menjalani pengobatan OAT Lini I tahun 2010 - 2015
- ✦ Peneliti mentaati Pedoman Penelitian RSUP Dr. Kariadi.
- ✦ Sebelum melakukan penelitian, peneliti agar bertemu Kepala Instalasi dan Kepala Ruangan dengan membawa Surat Izin Penelitian.
- ✦ Tidak mengganggu pelayanan.
- ✦ Memberikan laporan hasil penelitian kepada Bagian Diklit RSUP Dr. Kariadi.

Atas perhatian dan kerjasama Saudara diucapkan terima kasih.

An. Direktur Utama
 Direktur SDM dan Pendidikan



dr. Bambang Sudarmanto, Sp.A(K), MARS
 NIP. 19560531-198403 1 001

Tembusan Yth :
 1. Ka. Instalasi Rekam Medis
 ② Yang bersangkutan

3. Hasil pengolahan data dengan SPSS

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Komorbid * ESO	167	100.0%	0	0.0%	167	100.0%

Komorbid * ESO Crosstabulation

Count

		ESO		Total
		Tidak ada	Ada	
Komorbid	Tidak ada	57	12	69
	Ada	80	18	98
Total		137	30	167

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.026 ^a	1	.871		
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.026	1	.871		
Fisher's Exact Test				1.000	.520
Linear-by-Linear Association	.026	1	.872		
N of Valid Cases	167				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12,40.

b. Computed only for a 2x2 table

4. Biodata Mahasiswa

Identitas

Nama : Ivona Oliviera
 NIM : 22010112130152
 Tempat/tanggal lahir : Temanggung, 5 Oktober 1994
 Jenis kelamin : Perempuan
 Alamat : Jl. Diponegoro 102 Parakan, Temanggung
 Nomor Telepon : (0293)596033
 Nomor HP : 085740344788
 e-mail : ivonaoliviera@gmail.com

Riwayat Pendidikan Formal

- | | |
|---|--------------------|
| 1. SD Remaja Parakan | Lulus tahun : 2006 |
| 2. SMP Remaja Parakan | Lulus tahun : 2009 |
| 3. SMA Kolese Loyola Semarang | Lulus tahun : 2012 |
| 4. Fakultas Kedokteran Universitas Diponegoro | Masuk tahun : 2012 |

Riwayat Organisasi

1. Staff Divisi Pengembangan Mahasiswa KSM (2014)
2. Staff Divisi Interna RHEU (2014)
3. Pelayanan Rohani Mahasiswa Katolik Fakultas Kedokteran UNDIP (2014-2016)

Prestasi

1. Finalis Lomba PKM-GT Medical Fiesta 2014 di Universitas Brawijaya Malang
2. Finalis Lomba Poster Publik Scientific Fair 2015 di Universitas Diponegoro
3. Finalis Lomba Video Edukasi Scientific Fair 2015 di Universitas Diponegoro
4. Juara II Lomba Poster Publik Airlangga Medical Scientific Week 2015 Universitas Airlangga Surabaya