

DAFTAR PUSTAKA

- Abbasifard M, Khorramdelazad H, 2020. The Bio-mission of interleukin-6 in the pathogenesis of Covid-19. In review article: a brief look at potential therapeutic tactics, *Life Sciences*, vol (257). *ELSEVIER*. P.1-8.
- Barrett D. IL-6 Blockade in Cytokine Storm Syndromes. 2019;6.
- B Li, J. YangF. Zhao et al., Prevalence and impact of cardiovascular metabolic diseases on Covid-19 in China,” *Clinical Research in Cardiology*, vol. 109, no. 5, pp. 531–538, 2020.
- Behrens, E. M. and Koretzky, G. A. (2017) ‘Review: Cytokine Storm Syndrome: Looking Toward the Precision Medicine Era’, *Arthritis and Rheumatology*, 69(6), pp. 1135–1143. doi: 10.1002/art.40071.
- Beltempo, P. *et al.* (2021) ‘Persistence of SARS-CoV-2 RNA in post-mortem swab 35 days after death : A case report’, *Forensic Science International*, 319, p. 110653.
- Buschmann, C. and Tsokos, M. (2020) ‘Corona-associated suicide – Observations made in the autopsy room’, *Legal Medicine*, 46(May 2020), p. 101723. doi: 10.1016/j.legalmed.2020.101723.
- Chen F fang, Zhong M, Liu Y, Zhang Y, Zhang K, Su D zhen, et al. The characteristics and outcomes of 681 severe cases with Covid-19 in China. *J Crit Care*. 2020;60:32–7.
- Chen W, Zheng KI, Liu S, Yan Z, Xu C, Qiao Z. Plasma CRP level is positively associated with the severity of Covid-19. *Ann Clin Microbiol Antimicrob*. 2020;19(1): 18.
- Connor, R. C. O. *et al.* (2020) ‘Correspondence Mutidisciplinary research priorities for the Covid-19 Pandemic’, *The Lancet Psychiatry*, 7(7), pp. e44–e45. doi: 10.1016/S2215-0366(20)30247-9.
- Cruz AS, Frias AM, Oliveira AI, dias L, Matos AR, Carvalho A *et al.*, 2020. Interleukin-6 is a biomarker for the development of fatal severe acute respiratory syndrome coronavirus-2 Pneumonia. In Original research Immunology. *Frontiers*. P.1-10.
- C. Wu, X. Chen, Y. Cai et al., “Risk factors associated with acute respiratory distress syndrome and death in patients with coronavirus disease 2019 pneumonia in Wuhan, China,” *JAMA Internal Medicine*, vol. 180, no. 7, p. 934, 2020.
- D. Wang, B. Hu, C. Hu et al., “Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China,” *JAMA*, vol. 323, no. 11, p. 1061, 2020.

- F. Zhou, T. Yu, R. Du et al., “Clinical course and risk factors for mortality of adult inpatients with Covid-19 in Wuhan, China: a retrospective cohort study,” *2e Lancet*, vol. 395, no. 10229, pp. 1054–1062, 2020.
- Fautrel, B. *et al.* (2007) ‘Recommendations of the French Society for Rheumatology regarding TNF a antagonist therapy in patients with rheumatoid arthritis’, *74(2007)*, pp. 627–637. doi: 10.1016/j.jbspin.2007.10.001.
- Gao, Y. M. *et al.* (2021) ‘Cytokine Storm Syndrome in coronavirus disease 2019: A narrative review’, *Journal of Internal Medicine*, 289(2), pp. 147–161. doi: 10.1111/joim.13144.
- Gao, Z. *et al.* (2020) ‘Autoimmunity Reviews. The correlation between SARS-Cov-2 infection and rheumatic disease’, *Autoimmunity Reviews*, 19(7), p. 102557. doi: 10.1016/j.autrev.2020.102557.
- Gautret, P. *et al.* (2020) ‘Hydroxychloroquine and azithromycin as a treatment of Covid-19 : result of an open label non randomized clinical trial’, pp. 1–24.
- Gupta KK, Khan MA, Singh SK. Constitutive Inflammatory Cytokine Storm: A Major Threat to Human Health. *J Interf Cytokine Res.* 2020;40(1):1–5.
- G. Lippi and M. Plebani, “Procalcitonin in patients with severe coronavirus disease 2019 (Covid-19): a meta-analysis,” *Clinica chimica acta; international journal of clinical chemistry*, vol. 505, pp. 190-191, 2020.
- Huang I, Pranata R, Lim MA, Oehadian A, Alisjahbana B. C-reactive protein, procalcitonin, D-dimer, and ferritin in severe coronavirus disease-2019: a meta-analysis. *Ther Adv Respir Dis.* 2020;14:1753466620937175.
- J. I. Odegaard and A. Chawla, “Connecting type 1 and type 2 diabetes through innate immunity,” *Cold Spring Harbor Perspectives in Medicine*, vol. 2, no. 3, Article ID a007724, 2012.
- J, J. *et al.* (2020) ‘IL-17A and TNF- α as potential biomarkers for acute respiratory distress syndrome and mortality in patients with obesity and Covid-19’, *Medical Hypotheses*, 144(May 2020), p. 109935. doi: 10.1016/j.mehy.2020.109935.
- J. Yang, Y. Zheng, X. Gou et al., “Prevalence of comorbidities and its effects in patients infected with SARS-CoV-2: a systematic review and meta-analysis,” *International Journal of Infectious Diseases*, vol. 94, pp. 91–95, 2020.
- J, V. *et al.* (2020) ‘Cytokine and Growth Factor Reviews SARS-CoV-2 infection : The role of cytokines in Covid-19 disease’, *Cytokine and Growth Factor Reviews*, 54(May 2020), pp. 62–75. doi: 10.1016/j.cytogfr.2020.06.001.
- Joy, N. G., Mikeladze, M., Younk, L. M., Tate, D. B. & Davis, S. N. Effects of equivalent sympathetic activation during hypoglycemia on endothelial function and pro-atherothrombotic balance in healthy individuals and obese standard treated type 2 diabetes. *Metabolism* **65**, 1695–1705 (2016).

- Kim SJ, Lee JY, Yang JW, Lee KH, Effenberger M, Szpirt W *et al.*, 2021, Immunopathogenesis and treatment of cytokine storm in Covid-19. *In Theranostics*, volume (11). P.316-327.
- Leitzke, M., Stefanovic, D., Meyer, J. J., Schimpf, S. & Schonknecht, P. Autonomic balance determines the severity of Covid-19 courses. *Bioelectron. Med.* **6**, 22 (2020).
- Liu B, Li M, Zhou Z, Guan X, Xiang Y, 2020d. Can we use interleukin-6 (IL-6) blockade for coronavirus disease 2019 (Covid-19)-induced cytokine release syndrome (CRS), <https://doi.org/10.1016/j.jaut.2020.102452>, *ELSEVIER*. P.1-7.
- Liu H, Chen S, Liu M, Nie H, Lu H, 2020c. Comorbid Chronic Diseases are Strongly Correlated with Disease Severity among Covid-19 Patients: A Systematic review and Meta-Analysis. *Review In Aging and Disease*. P.668-76.
- Nakamura, M. *et al.* (2021) ‘A regional approach for infection prevention in death investigations during the Covid-19 era’, *Legal Medicine*, 48(October 2020), p. 101829. doi: 10.1016/j.legalmed.2020.101829.
- Ortiz-prado E, Simbaña-rivera K, Barreno LG-, Rubio-neira M, Guaman LP, Kyriakidis NC, et al. Clinical , molecular , and epidemiological characterization of the SARS-CoV-2 virus and the Coronavirus Disease 2019 (Covid-19), a comprehensive literature review. *Diagnostic Microbiol Infect Dis [Internet]*. 2020;98(1):115094. <https://doi.org/10.1016/j.diagmicrobio.2020.115094>.
- Parekh, U. *et al.* (2020) ‘A roadmap to the safe practice of forensic medicine in the Covid-19 pandemic’, *Journal of Forensic and Legal Medicine*, 76(August 2020), p. 102036. doi: 10.1016/j.jflm.2020.102036.
- Pelaia C, Tinello C, Vatrella A, Sarro G De. Lung under attack by Covid-19- induced cytokine storm : pathogenic mechanisms and therapeutic implications.2020;1–9.
- Machhi J, Herskovitz J, Senan AM, Dutta D, Nath B, Oleynikov MD, et al. The Natural History , Pathobiology , and Clinical Manifestations of SARS-CoV-2 Infections. 2020.
- Qin C, Zhou L, Hu Z, Zhang S, Yang S, Tao Y, et al. Dysregulation of Immune Response in Patients With Coronavirus 2019 (Covid-19) in Wuhan , China. 2020;2019:4–10.
- Ragab, D. *et al.* (2020) ‘The Covid-19 Cytokine Storm; What We Know So Far’, *Frontiers in Immunology*, 11(June), pp. 1–4. doi: 10.3389/fimmu.2020.01446.
- R. Gupta, A. Ghosh, A. K. Singh, and A. Misra, “Clinical considerations for patients with diabetes in times of COVID- 19 epidemic,” *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, vol. 14, no. 3, pp. 211-212, 2020.
- Richardson S, Hirsch JS, Narasimhan M. Presenting characteristics, comorbidities, and outcome among 5700 patients hospitalized with Covid-19 in the New York City Area. *JAMA*. 2020; 323(20): 2052-59.

- Sabaka P, Koscalova A, Straka I, Hodosy J, Liptak R, Kmotorkova B *et al.*, 2021, Role of interleukin 6 as a predictive factor for a severe course of Covid-19: retrospective data analysis of patients from a long-term care facility during Covid-19 outbreak. In Research article. *BMC Infectious Diseases*, volume (21). P.2-8.
- Salazar, J. *et al.* (2014) ‘C-Reactive Protein: An In-Depth Look into Structure, Function, and Regulation’, *International Scholarly Research Notices*, 2014(December), pp. 1–11. doi: 10.1155/2014/653045.
- Seiler, N. *et al.* (2021) ‘Letter to the Editor Psychopathological consequences of the Covid-19 pandemic : A case report of psychosis’, *Psychiatry Research*, 296, p. 113703. doi: 10.1016/j.psychres.2020.113703.
- S. E. Shoelson, “Inflammation and insulin resistance,” *Journal of Clinical Investigation*, vol. 116, no. 7, pp. 1793–1801, 2006.
- Sharifpour M, Rangaraju S, Liu M, Alabyad D, Nahab FB, Creel-Bulos CM, *et al.* Covid-19 Quality & Clinical Research Collaborative. C-Reactive protein as a prognostic indicator in hospitalized patients with Covid-19. *PLoS One*. 2020;15(11):e0242400.
- Stringer D, Braude P, Myint PK, Evans L, Collins JT, Verduri A, *et al.* The role of C-reactive protein as a prognostic marker in Covid-19. *Int J Epidemiol*. 2021;50(2):420-429.
- Sproston, N. R., & Ashworth, J. J. 2018. Role of C-reactive protein at sites of inflammation and infection. *Front Immunol*. 9, 1–11. (<https://doi.org/10.3389/fimmu.2018.00754>).
- Sultan, S. (2020) *Post Mortem Results Are Gradually Revealing The Pathophysiology Of Covid-19 Diseases*.
- Sun H, Guo P, Zhang L, Wang F, 2020, Serum interleukin-6 concentration and the severity of Covid-19 Pneumonia: A retrospective study at a single center in Bengbu City, Anhui Province, China, in January and February 2020. *In Medical Science*. P.1-6.
- Tanaka T, Narazaki M, Kishimoto T. IL-6 in inflammation, Immunity, And disease. *In Cold Spring Harbor Perspective in Biology*. 2014;6(10). doi:10.1101/cshperspect.a016295.
- Tan, C., Huang, Y., Shi, F., Tan, K., Ma, Q., Chen, Y., Jiang, X., & Li, X. 2020. C reactive protein correlates with computed tomographic findings and predicts severe Covid-19 early. *J. Med. Virol.* 92(7), 856–862. (<https://doi.org/10.1002/jmv.25871>).
- Wahid, B. (2020) ‘Forensic case-work analysis and legal challenges during pandemic: an update from Pakistan’, *Legal Medicine*, p. 101792. doi: 10.1016/j.legalmed.2020.101792.
- WHO (2014) ‘C-reactive protein concentrations as a marker of inflammation or infection

for interpreting biomarkers of micronutrient status. *Vitamin and Mineral Nutrition Information System.*, pp. 1–4.

- Wang, L. 2020. C-reactive protein levels in the early stage of Covid-19. *Med. Mal. Infect.* 50(4), 332–334. (<https://doi.org/10.1016/j.medmal.2020.03.007>).
- Rhodes, B., Fürnrohr, B. G., & Vyse, T. J. C-reactive protein in rheumatology: biology and genetics. *Nature Reviews Rheumatology*. 2011;7(5), 282–289.
- Kermali, M., Khalsa, R. K., Pillai, K., Ismail, Z., & Harky, A. The role of biomarkers in diagnosis of Covid-19 – A systematic review. *Life Sciences*. 2020; 117788. doi:10.1016/j.lfs.2020.117788.
- Karnen GB., Iris R. *Imunologi dasar*. Ed.12. Badan penerbit FKUI. 2018; 704.
- Qin, C., Zhou, L., Hu, Z., Zhang, S., Yang, S., Tao, Y., & Tian, D. S. (2020). Dysregulation of immune response in patients with Covid-19 in Wuhan, China. *Clinical Infectious Diseases*. doi: <https://doi.org/10.1093/cid/ciaa248>.
- Liu, F., Li, L., Xu, M., Wu, J., Luo, D., Zhu, Y., et al. Prognostic value of interleukin-6, C-reactive protein, and procalcitonin in patients with Covid-19. 2020. *Journal of Clinical Virology*, 104370. doi:10.1016/j.jcv.2020.104370.
- Liu, W., Tao, Z. W., Wang, L., Yuan, M. L., Liu, K., Zhou, L., Wei, S., Deng, Y., Liu, J., Liu, H. G., Yang, M., & Hu, Y. 2020. Analysis of factors associated with disease outcomes in hospitalized patients with 2019 novel coronavirus disease. *Chin.Med.J.(Engl)*.133(9),1032–1038. (<https://doi.org/10.1097/CM9.0000000000000775>).
- Ji w., Bishnu G., Cai Z., Shen X., Analysis clinical features of Covid-19 infection in secondary epidemic area and report potential biomarker in evaluation. medRxiv. 2020;03:10.20033613.
- Chan AS., Rout A. Use of neutrophil to lymphocyte and platelet to lymphocyte ratio in covid 19. *J Clin Med Res*. 2020;12:4488-453.
- Cevik M., Kuppalli K., Kindrachuk J., Peiris M. Virology, transmission, and pathogenesis of SARS-CoV-2. Clinical update. *BMJ*. 2020;371:m3862.
- Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, Wang B, Xiang H, Cheng Z, Xiong Y, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. *JAMA*. 2020;323(11):1061. doi:10.1001/jama.2020.1585.
- P. Williams, C. McWilliams, K. Soomro et al., “The dynamics of procalcitonin in Covid-19 patients admitted to intensive care unit - a multi-centre cohort study in the South West of England, UK,” *Journal of Infection*, vol. 82, no. 6, pp. e24– e26, 2021.
- Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, Zhang L, Fan G, Xu J, Gu X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020;395 (10223):497–506.doi:10.1016/S0140-6736(20)30183-5.

- Yang L, Liu S, Liu J, Zhang Z, Wan X, Xiao J et al., 2020. Review article Covid-19: Immunopathogenesis and immunotherapeutics, In Signal transduction and targeted therapy, Volume 5 (128), China: *Springer nature*, P:1-8.
- Zhu, B., Feng, X., Jiang, C., Mi, S., Yang, L., Zhao, Z., Zhang, L. (2021). Correlation between white blood cell count at admission and mortality in Covid-19 patients : a retrospective study. *BMC Infectious Diseases*, 21(1). doi:10.1186/s12879-021-06277-3.
- Z. Wu and J. M. McGoogan, “Characteristics of and important lessons from the coronavirus disease 2019 (COVID- 19) outbreak in China,” *JAMA*, vol. 323, no. 13, p. 1239, 2020.
- Zhang C, Wu Z, Li JW, Zhao, Wang GQ, 2020. The cytokine release syndrome (CRS) of severe Covid-19 and interleukin-6 receptor (IL-6R) antagonist tocilizumab may be the key to reduce the mortality. In International journal of antimicrobial Agents, *ELSEVIER*, P.1-6.
- C. Gebhard, V. Regitz-Zagrosek, H. K. Neuhauser, R. Morgan, and S. L. Klein, “Impact of sex and gender on Covid-19 out comes in Europe,” *Biology of Sex Differences*, vol. 11, no. 1, p. 29, 2020.
- Gubernatorova EO, Gorshkova EA, Polinova AI, Drutskaya MS, 2020. IL-6: Relevance for immunopathology of SARS-CoV-2 In Cytokine and Growth Factor Reviews, *ELSEVIER*.
- Yuki, K., Fujiogi, M., & Koutsogiannaki, S. 2020. Covid-19 pathophysiology : A review. *Clin. Immunol.* 215. (<https://doi.org/10.1016/j.clim.2020.108427>).
- Zhao Y, Nie H-X, Hu K, Wu X-J, Zhang YT, Wang M-M, dkk. Abnormal immunity of non survivors with Covid-19: predictors for mortality. *Infect Dis Poverty*. Desember 2020;9(1):108
- Zhu Z, Cai T, Fan L, Lou K, Hua X, Huang Z, et al. Clinical value of immuneinflammatory parameters to assess the severity of coronavirus disease 2019. *Int J Infect Dis* [Internet]. 2020;95:332–9. Tersedia pada: <https://doi.org/10.1016/j.ijid.2020.04.041>.

LAMPIRAN

Lampiran 1 : Foto Kegiatan Penelitian

Rumah Sakit Pendidikan Universitas Hasanuddin



Rumah Sakit Wahidin Sudirohusodo



Lampiran 2 : Tabulasi Data

NO	JK	UMUR (THN)	KAT. UMUR	L. RWT	ST. KOM	ADA/TIDAK ADA KOMORBID	CRP	Nilai CRP	MEDIAN CRP : 70.9	MEAN CRP 120.3	IL6	Nilai IL6	MEDIAN IL6 90.87	MEAN IL-6 665.6
1	2	84	2	1	2	2	48	2	1	1	104.7	2	2	1
22	1	81	2	1	1	1	0.2	1	1	1	238	2	2	1
23	1	69	2	1	2	2	151.3	2	2	2	1890	2	2	2
24	1	56	1	1	2	2	159.3	2	2	2	189.3	2	2	1
25	2	69	2	1	1	1	288	2	2	2	332.7	2	2	1
43	1	73	2	2	1	1	284.6	2	2	2	714.6	2	2	2
49	2	75	2	2	3	2	69.7	2	1	1	10	2	1	1
64	1	61	2	2	3	2	144.0	2	2	2	31.24	2	1	1
67	1	54	1	1	2	2	130	2	2	2	169.6	2	2	1
71	2	75	2	2	2	2	196.8	2	2	2	23.82	2	1	1
72	1	38	1	2	1	1	21.2	2	1	1	62.16	2	1	1
73	1	69	2	1	1	1	339	2	2	2	25.86	2	1	1
74	1	67	2	1	3	2	348.6	2	2	2	1538	2	2	2
77	2	29	1	1	2	2	2.5	1	1	1	44.55	2	1	1
79	2	59	1	1	1	1	24	2	1	1	15.92	2	1	1
80	1	43	1	2	1	1	30.1	2	1	1	16.6	2	1	1
83	2	62	2	1	1	1	36.1	2	1	1	83.28	2	1	1
84	2	56	1	2	3	2	64.0	2	1	1	588.6	2	2	1
90	1	71	2	1	1	1	111.2	2	2	1	81	2	1	1
94	1	50	1	2	3	2	132.3	2	2	2	73.42	2	1	1
95	2	62	2	2	2	2	11.2	2	1	1	20.7	2	1	1
96	2	54	1	1	2	2	70.9	2	2	1	117	2	2	1
98	1	64	2	1	2	2	132.8	2	2	2	168.1	2	2	1
99	2	62	2	1	3	2	32.6	1	1	1	30.09	2	1	1
102	1	69	2	1	3	2	63.6	2	1	1	17.75	2	1	1
103	2	72	2	1	2	2	187.0	2	2	2	2905	2	2	2

93

104	1	66	2	1	3	2	21.6	2	1	1	90.87	2	2	1
106	1	70	2	2	3	2	247.3	2	2	2	62.36	2	1	1
107	1	75	2	1	2	2	58.3	2	1	1	41.02	2	1	1
61	1	57	1	2	3	2	22.5	2	1	1	5000	2	2	2
81	1	70	2	2	3	2	311.4	2	2	2	5000	2	2	2
110	2	56	1	2	3	2	14.9	2	1	1	109	2	2	1
271	1	66	2	2	3	2	215.5	2	2	2	2218	2	2	2
	1=L		1 = 19-60 TAHUN	1 <= 14 hari	1= TANPA KOMORBID	1 = TIDAK ADA KOMORBID		1= NORMAL	1= RENDAH	1= RENDAH		1= NORMAL	1= RENDAH	1= RENDAH
	2=P		2 > 60 TAHUN	2 > 14 hari	2= HIPERTENSI	2 = ADA KOMORBID		2=TINGGI	2=TINGGI	2=TINGGI		2=TINGGI	2=TINGGI	2=TINGGI
					3= HIPERTENSI + DM									

Lampiran 3 : Hasil SPSS Data Penelitian

HASIL SPSS UJI UNIVARIAT

1. ANALISIS UNIVARIAT JENIS KELAMIN DAN USIA

Statistics

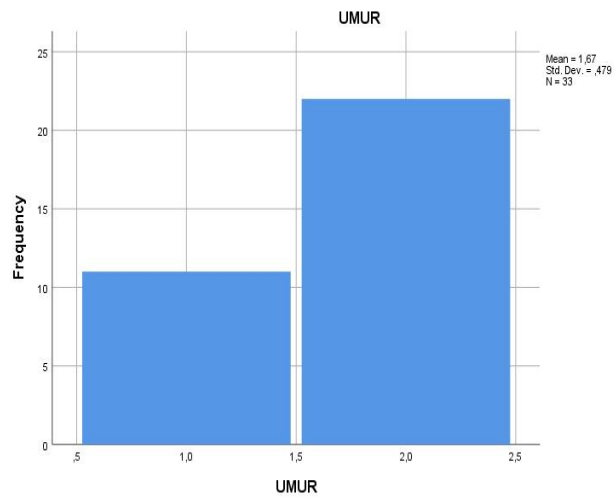
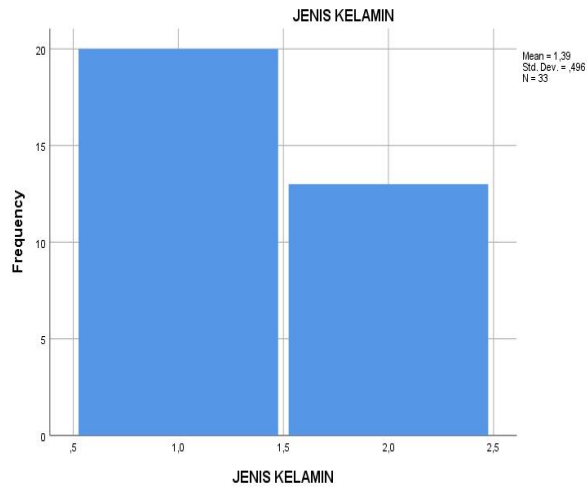
		JENIS KELAMIN	UMUR
N	Valid	33	33
	Missing	0	0
Mean		1,39	1,67
Median		1,00	2,00
Mode		1	2
Std. Deviation		,496	,479
Minimum		1	1
Maximum		2	2
Sum		46	55

JENIS KELAMIN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	LAKI-LAKI	20	60,6	60,6	60,6
	PEREMPUAN	13	39,4	39,4	100,0
Total		33	100,0	100,0	

UMUR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19-60 TAHUN	11	33,3	33,3	33,3
	> 60 TAHUN	22	66,7	66,7	100,0
Total		33	100,0	100,0	



2. LAMA PERAWATAN

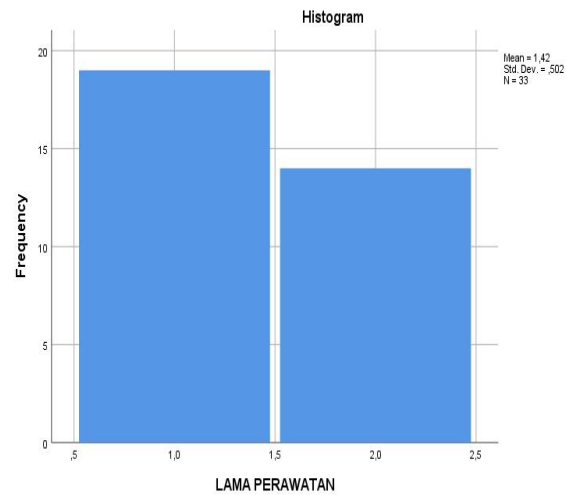
Statistics

LAMA PERAWATAN

N	Valid	33
	Missing	0
Mean		1,42
Median		1,00
Mode		1
Std. Deviation		,502
Minimum		1
Maximum		2
Sum		47

LAMA PERAWATAN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 14 HARI	19	57,6	57,6	57,6
	> 14 HARI	14	42,4	42,4	100,0
	Total	33	100,0	100,0	



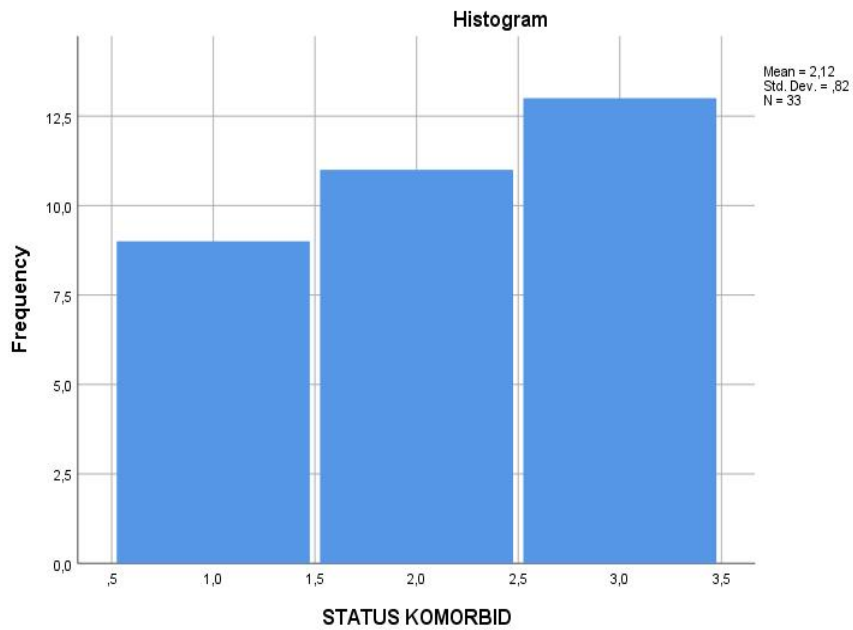
3. STATUS KOMORBID

Statistics

STATUS KOMORBID		
N	Valid	33
	Missing	0
Mean		2,12
Median		2,00
Mode		3
Std. Deviation		,820
Minimum		1
Maximum		3
Sum		70

STATUS KOMORBID

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TANPA KOMORBID	9	27,3	27,3	27,3
	HIPERTENSI	11	33,3	33,3	60,6
	HIPERTENSI + DIABETES	13	39,4	39,4	100,0
Total		33	100,0	100,0	



4. ADA/TIDAK ADA KOMORBID

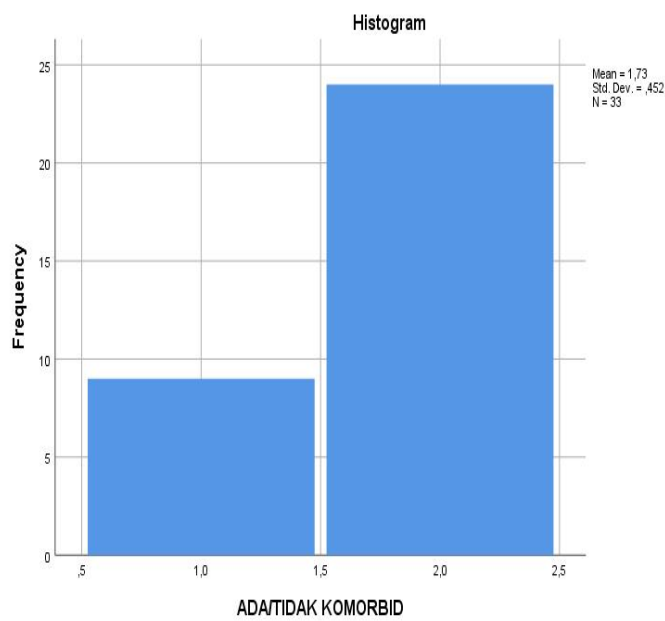
Statistics

ADA/TIDAK KOMORBID

N	Valid	33
	Missing	0
Mean		1,73
Median		2,00
Mode		2
Std. Deviation		,452
Minimum		1
Maximum		2
Sum		57

ADA/TIDAK KOMORBID

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	TIDAK ADA KOMORBID	9	27,3	27,3	27,3
	ADA KOMORBID	24	72,7	72,7	100,0
Total		33	100,0	100,0	



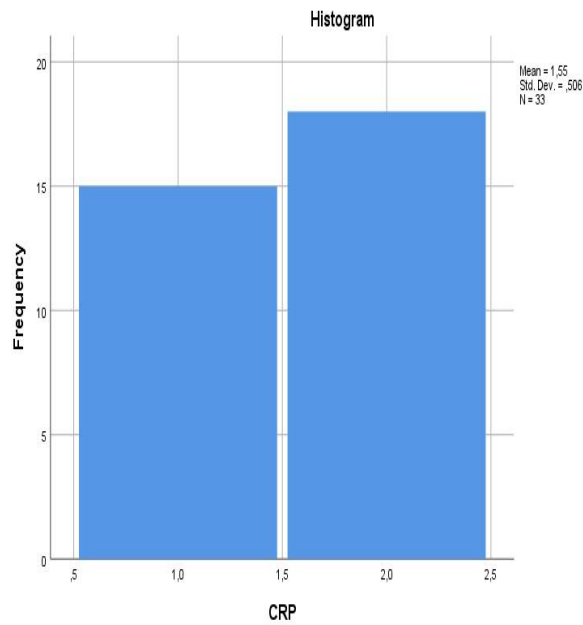
5. CRP

Statistics

CRP		
N	Valid	33
	Missing	0
Mean		1,55
Median		2,00
Mode		2
Std. Deviation		,506
Minimum		1
Maximum		2
Sum		51

CRP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RENDAH	15	45,5	45,5	45,5
	TINGGI	18	54,5	54,5	100,0
Total		33	100,0	100,0	



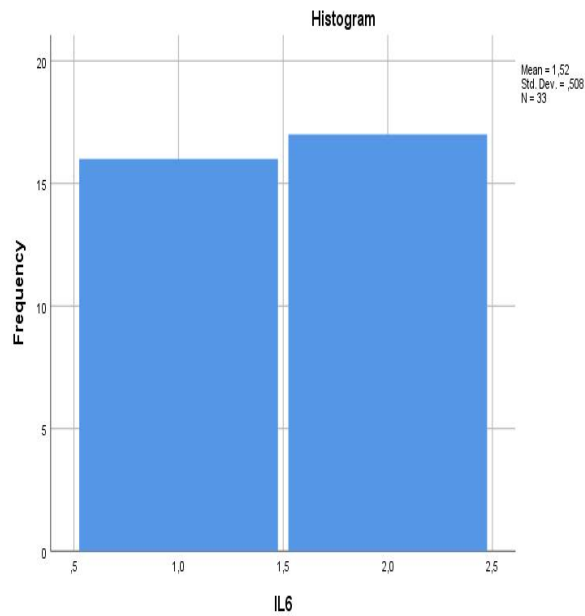
6. IL-6

Statistics

IL-6		
N	Valid	33
	Missing	0
Mean		1,52
Median		2,00
Mode		2
Std. Deviation		,508
Minimum		1
Maximum		2
Sum		50

IL-6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RENDAH	16	48,5	48,5	48,5
	TINGGI	17	51,5	51,5	100,0
Total		33	100,0	100,0	



HASIL SPSS UJI CHI SQUARE

1. HUBUNGAN CRP TERHADAP TANPA KOMORBID + HIPERTENSI

TANPA KOMORBID DAN HIPERTENSI * CRP Crosstabulation

Count

		CRP		Total
		RENDAH	TINGGI	
TANPA KOMORBID DAN HIPERTENSI	TANPA KOMORBID	5	4	9
	HIPERTENSI	0	11	11
Total		5	15	20

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	8,148 ^a	1	,004		
Continuity Correction ^b	5,455	1	,020		
Likelihood Ratio	10,128	1	,001		
Fisher's Exact Test				,008	,008
Linear-by-Linear Association	7,741	1	,005		
N of Valid Cases	20				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 2,25.

b. Computed only for a 2x2 table

2. HUBUNGAN CRP TERHADAP TANPA KOMORBID + HIPERTENSI/DIABETES

TANPA KOMORBID DAN HIPERTENSI+DIABETES * CRP Crosstabulation

Count

		CRP		Total
		RENDAH	TINGGI	
TANPA KOMORBID DAN HIPERTENSI+DIABETES	TANPA KOMORBID	3	6	9
	HIPERTENSI+DIABETES	3	10	13
Total		6	16	22

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,282 ^a	1	,595		
Continuity Correction ^b	,002	1	,965		
Likelihood Ratio	,279	1	,597		
Fisher's Exact Test				,655	,477
Linear-by-Linear Association	,269	1	,604		
N of Valid Cases	22				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 2,45.

b. Computed only for a 2x2 table

3. HUBUNGAN CRP TERHADAP HIPERTENSI DAN HIPERTENSI + DIABETES

HIPERTENSI DAN HIPERTENSI+DIABETES * CRP Crosstabulation

Count

		CRP		Total
		RENDAH	TINGGI	
HIPERTENSI DAN	HIPERTENSI	4	7	11
HIPERTENSI+DIABETES	HIPERTENSI+DIABETES	6	7	13
Total		10	14	24

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,235 ^a	1	,628		
Continuity Correction ^b	,005	1	,945		
Likelihood Ratio	,236	1	,627		
Fisher's Exact Test				,697	,473
Linear-by-Linear Association	,225	1	,635		
N of Valid Cases	24				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 4,58.

b. Computed only for a 2x2 table

4. HUBUNGAN CRP TERHADAP ADA/ TIDAK ADA KOMORBID

ADA/TIDAK ADA KOMORBID * CRP Crosstabulation

Count

		CRP		Total
		RENDAH	TINGGI	
ADA/TIDAK ADA	TIDAK ADA KOMORBID	7	2	9
KOMORBID	ADA KOMORBID	8	16	24
Total		15	18	33

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	5,215 ^a	1	,022		
Continuity Correction ^b	3,576	1	,059		
Likelihood Ratio	5,387	1	,020		
Fisher's Exact Test				,047	,029
Linear-by-Linear Association	5,057	1	,025		
N of Valid Cases	33				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 4,09.

b. Computed only for a 2x2 table

5. HUBUNGAN CRP TERHADAP LAMA PERAWATAN

LAMA PERWATAN * CRP Crosstabulation

Count

		CRP		Total
		RENDAH	TINGGI	
LAMA PERWATAN	< 14 HARI	12	7	19
	> 14 HARI	3	11	14
Total		15	18	33

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	5,661 ^a	1	,017		
Continuity Correction ^b	4,103	1	,043		
Likelihood Ratio	5,918	1	,015		
Fisher's Exact Test				,033	,020
Linear-by-Linear Association	5,490	1	,019		
N of Valid Cases	33				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,36.

b. Computed only for a 2x2 table

6. HUBUNGAN IL-6 TERHADAP TANPA KOMORBID + HIPERTENSI

TANPA KOMORBID+ HIPERTENSI * IL-6 Crosstabulation

Count

		IL-6		Total
		RENDAH	TINGGI	
TANPA KOMORBID+ HIPERTENSI	TANPA KOMORBID	5	4	9
	HIPERTENSI	0	11	11
Total		5	15	20

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	8,148 ^a	1	,004		
Continuity Correction ^b	5,455	1	,020		
Likelihood Ratio	10,128	1	,001		
Fisher's Exact Test				,008	,008
Linear-by-Linear Association	7,741	1	,005		
N of Valid Cases	20				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 2,25.

b. Computed only for a 2x2 table

7. HUBUNGAN IL-6 TERHADAP TANPA KOMORBID + HIPERTENSI/DIABETES

TANPA KOMORBID DAN HIPERTENSI+DIABETES * IL-6 Crosstabulation

Count

		IL-6		Total
		RENDAH	TINGGI	
TANPA KOMORBID DAN HIPERTENSI+DIABETES	TANPA KOMORBID	6	3	9
	HIPERTENSI+DIABETES	6	7	13
Total		12	10	22

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,903 ^a	1	,342		
Continuity Correction ^b	,265	1	,607		
Likelihood Ratio	,914	1	,339		
Fisher's Exact Test				,415	,305
Linear-by-Linear Association	,862	1	,353		
N of Valid Cases	22				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 4,09.

b. Computed only for a 2x2 table

8. HUBUNGAN IL-6 TERHADAP HIPERTENSI DAN HIPERTENSI + DIABETES

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
HIPERTENSI DAN HIPERTENSI +DIABETES * IL-6	24	72,7%	9	27,3%	33	100,0%

HIPERTENSI DAN HIPERTENSI +DIABETES * IL-6 Crosstabulation

Count

		IL-6		Total
		RENDAH	TINGGI	
HIPERTENSI DAN HIPERTENSI +DIABETES	HIPERTENSI	4	7	11
	HIPERTENSI+DIABETES	6	7	13
Total		10	14	24

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,235 ^a	1	,628		
Continuity Correction ^b	,005	1	,945		
Likelihood Ratio	,236	1	,627		
Fisher's Exact Test				,697	,473
Linear-by-Linear Association	,225	1	,635		
N of Valid Cases	24				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 4,58.

b. Computed only for a 2x2 table

9. HUBUNGAN IL-6 TERHADAP ADA/ TIDAK ADA KOMORBID

ADA/TIDAK ADA KOMORBID * IL-6 Crosstabulation

Count

		IL-6		Total
		RENDAH	TINGGI	
ADA/TIDAK ADA KOMORBID	TIDAK KOMORBID	7	2	9
	ADA KOMORBID	9	15	24
Total		16	17	33

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	4,251 ^a	1	,039		
Continuity Correction ^b	2,792	1	,095		
Likelihood Ratio	4,428	1	,035		
Fisher's Exact Test				,057	,046
Linear-by-Linear Association	4,123	1	,042		
N of Valid Cases	33				

a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 4,36.

b. Computed only for a 2x2 table

10. HUBUNGAN IL-6 TERHADAP LAMA PERAWATAN

LAMA PERAWATAN * IL-6 Crosstabulation

Count

		IL-6		Total
		RENDAH	TINGGI	
LAMA PERAWATAN	< 14 HARI	12	7	19
	> 14 HARI	4	10	14
Total		16	17	33

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	3,860 ^a	1	,049		
Continuity Correction ^b	2,600	1	,107		
Likelihood Ratio	3,958	1	,047		
Fisher's Exact Test				,080	,053
Linear-by-Linear Association	3,743	1	,053		
N of Valid Cases	33				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 6,79.

b. Computed only for a 2x2 table

HASIL SPSS UJI SPEARMAN RHO

1. HUBUNGAN CRP DAN IL6 TERHADAP STATUS KOMORBID

Correlations

			CRP	IL-6
Spearman's rho	CRP	Correlation Coefficient	1.000	.250
		Sig. (2-tailed)	.	.516
		N	9	9
	IL-6	Correlation Coefficient	.250	1.000
		Sig. (2-tailed)	.516	.
		N	9	9

Correlations

			CRP	IL-6
Spearman's rho	CRP	Correlation Coefficient	1.000	.518
		Sig. (2-tailed)	.	.102
		N	11	11
	IL-6	Correlation Coefficient	.518	1.000
		Sig. (2-tailed)	.102	.
		N	11	11

Correlations

			CRP	IL-6
Spearman's rho	CRP	Correlation Coefficient	1.000	.190
		Sig. (2-tailed)	.	.535
		N	13	13
	IL-6	Correlation Coefficient	.190	1.000
		Sig. (2-tailed)	.535	.
		N	13	13

2. HUBUNGAN CRP DAN IL6 TERHADAP ADA/ TIDAK ADA KOMORBID

Correlations

			CRP	IL-6
Spearman's rho	CRP	Correlation Coefficient	1.000	.250
		Sig. (2-tailed)	.	.516
		N	9	9
	IL-6	Correlation Coefficient	.250	1.000
		Sig. (2-tailed)	.516	.
		N	9	9

Correlations

			CRP	IL-6
Spearman's rho	CRP	Correlation Coefficient	1.000	.400
		Sig. (2-tailed)	.	.05
		N	24	24
	IL-6	Correlation Coefficient	.400	1.000
		Sig. (2-tailed)	.05	.
		N	24	24

*. Correlation is significant at the 0.05 level (2-tailed).

3. HUBUNGAN CRP DAN IL6 TERHADAP LAMA PERAWATAN

Correlations

			CRP	IL-6
Spearman's rho	CRP	Correlation Coefficient	1.000	.470*
		Sig. (2-tailed)	.	.042
		N	19	19
	IL-6	Correlation Coefficient	.470*	1.000
		Sig. (2-tailed)	.042	.
		N	19	19

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

			CRP	IL-6
Spearman's rho	CRP	Correlation Coefficient	1.000	.350
		Sig. (2-tailed)	.	.220
		N	14	14
	IL-6	Correlation Coefficient	.350	1.000
		Sig. (2-tailed)	.220	.
		N	14	14

Lampiran 4 : Rekomendasi Persetujuan Etik



REKOMENDASI PERSETUJUAN ETIK

Nomor : 97/UN4.6.4.5.31/ PP36/ 2022

Tanggal: 4 Maret 2022

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH22020064	No Sponsor	
Peneliti Utama	dr. Indrayaty AR	Sponsor	
Judul Peneliti	DINAMIKA KADAR C-REACTIVE PROTEIN (CRP) DAN INTERLEUKIN-6 (IL-6) BERDASARKAN KOMORBID DAN LAMA PERAWATAN PADA PASIEN COVID-19 YANG BERAKHIR DENGAN KEMATIAN		
No Versi Protokol	2	Tanggal Versi	1 Maret 2022
No Versi PSP		Tanggal Versi	
Tempat Penelitian	RS Universitas Hasanuddin Dan RS Dr. Wahidin Sudirohusodo Makassar		
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku 4 Maret 2022 sampai 4 Maret 2023	Frekuensi review lanjutan
Ketua KEPK FKUH RSUH dan RSWS	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan	
Sekretaris KEPK FKUH RSUH dan RSWS	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	Tanda tangan	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

Lampiran 5 : Biodata Peneliti Utama

BIODATA PENELITI UTAMA

A. DATA PRIBADI

Nama : dr. Indrayaty A.R.
Tempat/ Tanggal Lahir : Tonasa I/ 26 Juli 1983
Agama : Islam
Pekerjaan : Dokter (PNS)
NIP : 19830726 200902 2 007
Pangkat/ Golongan : Pembina/ IVa

B. RIWAYAT PENDIDIKAN

NO	STRATA	INSTITUSI	TEMPAT	TAHUN
1.	SD	SDN NO. 3 TONASA I	Pangkep	1989-1995
2.	SMP	SMP SEMEN TONASA I	Pangkep	1995-1998
3.	SMU	SMU SEMEN TONASA I	Pangkep	1998-2001
4.	DOKTER	UNIVERSITAS HASANUDDIN	Makassar	2001-2008
5.	PPDS	FORENSIK DAN MEDIKOLEGAL UNIVERSITAS HASANUDDIN	Makassar	2019- sekarang

C. RIWAYAT PEKERJAAN

NO	KEDUDUKAN	INSTANSI	TEMPAT	PERIODE
1.	CPNS	Puskesmas Mandalle	Kecamatan Mandalle, Kabupaten Pangkep.	2009-2010
2.	PNS	Puskesmas Mandalle	Kecamatan Mandalle, Kabupaten Pangkep.	2010- sekarang

