

DAFTAR PUSTAKA

- Al Barani, Salma., et al. Initial viral cycle threshold values in patients with COVID-19 and their clinical significance. *European Journal of Medical Research* (2022), 29:101.
- Cascella, M., Rajnik, M., Cuomo, A., Dulebohn, S.C. and Di Napoli, R., 2020. *Features, evaluation and treatment coronavirus* (COVID-19). In Statpearls [internet]. StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK554776/>
- Chen, N., Zhou, M., Dong, X., Qu, J., Gong, F., Han, Y., Qiu, Y., Wang, J., Liu, Y., Wei, Y. and Yu, T., 2020. *Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study*. *The Lancet*, 395(10223), pp.507-513. DOI:10.1016/S0140-6736(20)30211-7
- Dahdouh E, Lázaro-Perona F, Romero-Gómez MP, Mingorance J, García-Rodríguez J. Ct values from SARS-CoV-2 diagnostic PCR assays should not be used as direct estimates of viral load. *Journal of Infection*. 2021 Mar 1;82(3):414-51.
- Dea Tamara. 2022. Hubungan Nilai Cycle Treshold Value (CT Value) dengan Tingkat Kematian Pasien Covid-19 di Rumah Sakit Umum Daerah (RSUD) Pesawaran Lampung. Universitas Malahayati. Bandar Lampung.
- Dika Rifky F dan Lelly Yuniarti. Hubungan rasio CT dan espresi gen E dengan kejadian gagal napas pada pasien covid-19 rawat inap di RS X. *Journal Riset Kedokteran*. Volume 2, No. 1, Tahun 2022, Hal: 107-115
- Direktorat Jenderal Pencegahan dan Pengendalian Penyakit Kementerian Kesehatan Republik Indonesia, 2020. Pedoman Pencegahan dan Pengendalian Coronavirus Disease (COVID-19), Maret 2020. *Kementerian Kesehatan Republik Indonesia*. Jakarta. Available at:

[https://www.kemkes.go.id/resources/download/info-terkini/COVID-19%20dokumen%20resmi/2%20Pedoman%20Pencegahan%20dan%20Pengendalian%20Coronavirus%20Disease%20\(COVID-19\).pdf](https://www.kemkes.go.id/resources/download/info-terkini/COVID-19%20dokumen%20resmi/2%20Pedoman%20Pencegahan%20dan%20Pengendalian%20Coronavirus%20Disease%20(COVID-19).pdf)

Erlina Burhan, Agus Dwi Susanto, Sally A Nasution EG, Ceva Wicaksono Pitoyo, Adityo Susilo, Isman Firdaus A, Santoso, Dafsah Arifa Juzar, Syafri Kamsul Arif NG. L, Wulung, Triya Damayanti, Wiwien Heru Wiyono P, Fathiyah Isbaniah, Diah Handayani, Soedarsono, Harsini JR, Sugiri, Afiatin, Edy Rizal Wahyudi, Tri Juli Edi Tarigan RH, dkk. COVID-19. edisi pertama Jakarta: Perhimpunan Dokter Paru Indonesia; 2020.

G. Pascarella , A. Strumia , C. Piliago , F. Bruno , R. Del.Buono , F. Costa , S. Scarlata , FE Agrò Diagnosis dan manajemen COVID-19: tinjauan komprehensif J.Magang. Med. , 288 (2020) , hlm. 192 - 206 , 10.1111/joim.13091

Josi Jeremia Manurung dan Asep Sukohar. Hubungan Antara CT Value pada Test RT-PCR Terhadap Parameter Klinis Pasien COVID-19. *Medula*. Vol 11. No. 1. April 2021.

Kementerian PPN/Bappenas, 2020. Kriteria 1: Angka Reproduksi Efektif (Rt) Indonesia Tanggal 22 November 2020. Available at: <http://covid.bappenas.go.id/kriteria1>

La Scola B, Le Bideau M, Andreani J, Hoang VT, Grimaldier C, Colson P, dkk. Viral RNA load as determined by cell culture as a management tool for discharge of SARSCoV-2 patients from infectious disease wards. *European Journal of Clinical Microbiology & Infectious Diseases*. 2020;39(6):1059.

Macedo MCF, Pinheiro IM, Carvalho CJL, Fraga HCJR, Araujo IPC, Montes SS, dkk. Correlation between hospitalized patients' demographics, symptoms, comorbidities, and COVID-19 pandemic in Bahia, Brazil. *PLoS One*. 2020;15(12 December):1–15.

Menteri Kesehatan Republik Indonesia, 2020. Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/MENKES/413/2020 tentang Pedoman Pencegahan dan Pengendalian Coronavirus Disease (COVID19). *Kementerian Kesehatan Republik Indonesia*. Jakarta. Available at: https://kesmas.kemkes.go.id/perpu/konten/kmk/kmk_no._hk.01.07-menkes-413-2020_ttg_pedoman_pencegahan_dan_pengendalian_covid19

PDPI, 2020. Pneumonia COVID-19: Diagnosis & Penatalaksanaan di Indonesia. PDPI. Jakarta. Available at: https://www.persi.or.id/images/2020/data/buku_pneumonia_covid19.pdf

PDPI, PERKI, PAPDI, PERDATIN, IDAI, 2020. Protokol Tatalaksana COVID-19, Edisi 1: April 2020. PDPI, PERKI, PAPDI, PERDATIN, IDAI. Jakarta. Available at: [http://www.inaheart.org/perki/upload/files/Protokol%20Tatalaksana%20COVID-19%205OP%20FINAL\(4\).pdf](http://www.inaheart.org/perki/upload/files/Protokol%20Tatalaksana%20COVID-19%205OP%20FINAL(4).pdf)

PDPI, PERKI, PAPDI, PERDATIN, IDAI, 2020. Protokol Tatalaksana COVID-19, Edisi 2: Agustus 2020. PDPI, PERKI, PAPDI, PERDATIN, IDAI. Jakarta. Available at: <https://www.papdi.or.id/download/938-pedomantatalaksana-covid-19-edisi-2-agustus-2020>

Rajyalakshmi B, Srinivas Samavedam, P Ramakrishna Reddy, dan Narmada Aluru. Prognostic Value of “Cycle Treshold” in Confirmed COVID-19 Patients. *Indian Journal of Critical Care Medicine*. 25 (3). March 2021.

Shah S, Singhal T, Davar N, Thakkar P. No correlation between Ct values and severity of disease or mortality in patients with COVID 19 disease. *Indian Journal of Medical Microbiology*. 2021 Jan 1;39(1):116-7.

Satuan Tugas Penanganan COVID-19, 2020. Peta sebaran 22 November 2020. Available at: <https://covid19.go.id/peta-sebaran>

- Sonia N. Rao, Davide Manissero, Victoria R. Steele, and Josep Pareja. A Systematic Review of the Clinical Utility of Cycle Threshold Values in the Context of COVID-19. *Infect Dis Ther*. Published online: 28 July 2020. <https://doi.org/10.1007/s40121-020-00324-3>
- Tim Gugus Tugas Percepatan Penanganan COVID-19 Pemerintah Kota Medan, 2020. Data General Terkait COVID-19 Kota Medan Tanggal 22 November 2020. Available at: <https://covid19.pemkomedan.go.id/>
- Tim Kerja Kementerian Dalam Negeri untuk Dukungan Gugus Tugas COVID-19, 2020. Pedoman Umum Menghadapi Pandemi COVID-19 bagi Pemerintah Daerah: Pencegahan, Pengendalian, Diagnosis, dan Manajemen. Kementerian Dalam Negeri Republik Indonesia. Jakarta. Available at: https://www.kemendagri.go.id/documents/covid19/BUKU_PEDOMAN_COVID-19_KEMENDAGRI.pdf
- Tom MR, Mina MJ. *To Interpret the SARSCoV-2 Test, Consider the Cycle Threshold Value*. *Clin Infect Dis*. 2020;71(16):2252-2254. doi:10.1093/cid/ciaa619
- Vishal P. Shah, Wigdan H. Farah, James C. Hill, Leslie C Hassett, Matthew J. Binnicker, Joseph D. Yao, and M. Hassan Murad. Association Between SARS-CoV-2 Cycle Threshold Values and Clinical Outcomes in Patients With COVID-19: A Systematic Review and Meta Analysis. *Open Forum Infectious Disease*. 30 August 2021.
- WHO, 2020. Coronavirus disease (COVID-19) outbreak situation 22 November 2020. *Coronavirus disease (COVID-19) pandemic*. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- WHO, 2020. *Naming the Coronavirus disease (COVID-19) and the virus that causes it. Coronavirus disease 2019: Technical guidance*. Available at: <https://www.who.int/emergencies/diseases/novel->

coronavirus2019/technical-guidance/naming-the-coronavirus-disease-
(covid-2019)- and-the-virus-that-causes-it

Wu, Y.C., Chen, C.S. and Chan, Y.J., 2020. The outbreak of COVID-19: *An overview. Journal of the Chinese Medical Association*, 83(3), p.217.
Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7153464>

ZA, Safrizal dkk. Pedoman Umum Menghadapi Pandemi Covid-19 Bagi
Pemerintah Daerah. Jakarta: Menteri Dalam Negeri, 2020

LAMPIRAN

Lampiran : Hasil uji statistik menggunakan software SPSS

LAMPIRAN UJI UNIVARIAT

Jenis_kelamin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	L	58	43.9	43.9	43.9
	P	74	56.1	56.1	100.0
	Total	132	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Usia	132	2.00	85.00	43.0833	19.04877
Valid N (listwise)	132				

Lama_rawat_inap

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<= 10	83	62.9	62.9	62.9
	>10	49	37.1	37.1	100.0
	Total	132	100.0	100.0	

Keadaan_keluar

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Belum Sembuh	6	4.5	4.5	4.5
	Membaik	108	81.8	81.8	86.4
	Meninggal > 48 Jam	3	2.3	2.3	88.6
	Sembuh	15	11.4	11.4	100.0
	Total	132	100.0	100.0	

CT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<30	39	29.5	29.5	29.5

>30	93	70.5	70.5	100.0
Total	132	100.0	100.0	

Gejala klinis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Batuk	9	6.8	6.8	6.8
	Batuk sesekali, riwayat kontak ada	1	.8	.8	7.6
	Batuk, anosmia, riwayat kontak	1	.8	.8	8.3
	Batuk, Demam	11	8.3	8.3	16.7
	Batuk, Demam, anosmia dan augesia, riwayat kontak	1	.8	.8	17.4
	Batuk, Demam, riwayat kontak	1	.8	.8	18.2
	Batuk, Demam, Sesak napas	9	6.8	6.8	25.0
	Batuk, Demam, Sesak napas, augesia	1	.8	.8	25.8
	Batuk, Demam, Sesak napas, augesia dan anosmia	1	.8	.8	26.5
	Batuk, Demam, Sesak napas, riwayat kontak	2	1.5	1.5	28.0
	Batuk, Nyeri menelan, anosmia	1	.8	.8	28.8
	Batuk, riwayat kontak	3	2.3	2.3	31.1
	Batuk, Sesak napas	11	8.3	8.3	39.4
	Batuk, Sesak napas, anosmia	1	.8	.8	40.2
	Demam	16	12.1	12.1	52.3
	Demam, Batuk, anosmia dan augesia	1	.8	.8	53.0
	Demam, Mual muntah	3	2.3	2.3	55.3
	Demam, riwayat kontak	2	1.5	1.5	56.8
	Demam, Sesak napas	4	3.0	3.0	59.8
	Diare	5	3.8	3.8	63.6
	Hidung tersumbat	2	1.5	1.5	65.2
	Mual muntah	7	5.3	5.3	70.5

Nyeri menelan	11	8.3	8.3	78.8
Nyeri Perut	6	4.5	4.5	83.3
Pilek	5	3.8	3.8	87.1
Sesak napas	12	9.1	9.1	96.2
Sesak napas, Batuk	3	2.3	2.3	98.5
Sesak napas, Nyeri perut	1	.8	.8	99.2
Sesak napas, riwayat kontak	1	.8	.8	100.0
Total	132	100.0	100.0	

Komorbid

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid tidak ada	113	85.6	85.6	85.6
ada	19	14.4	14.4	100.0
Total	132	100.0	100.0	

LAMPIRAN UJI BIVARIAT

CT * Demam

Crosstab

			Demam	
			ya	tidak
CT	>30	Count	36	56
		% of Total	69.2%	68.7%
	<=30	Count	16	24
		% of Total	30.7%	30.0%
Total	Count	52	80	
	% of Total	100.0%	100.0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.009 ^a	1	.925	1.000	.538
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.009	1	.925		
Fisher's Exact Test					
Linear-by-Linear Association	.009	1	.925		
N of Valid Cases	132				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.76.

b. Computed only for a 2x2 table

CT * Batuk

Crosstab

			Batuk	
			ya	tidak
CT	>30	Count	39	53
		% of Total	68.4%	70.6%
	<=30	Count	18	22
		% of Total		

	% of Total	31.5%	29.3%
Total	Count	57	75
	% of Total	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.077 ^a	1	.781		
Continuity Correction ^b	.008	1	.931		
Likelihood Ratio	.077	1	.781		
Fisher's Exact Test				.849	.464
Linear-by-Linear Association	.077	1	.782		
N of Valid Cases	132				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.27.

b. Computed only for a 2x2 table

CT * Batuk_sesak

CT * Batuk_sesak Crosstabulation

			Batuk_sesak	
			sesak	tidak sesak
CT	>30	Count	21	18
		% of Total	75.0%	62.1%
	<=30	Count	7	11
		% of Total	25.0%	37.9%
Total		Count	28	29
		% of Total	100%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)

Pearson Chi-Square	1.102 ^a	1	.294		
Continuity Correction ^b	.585	1	.444		
Likelihood Ratio	1.110	1	.292		
Fisher's Exact Test				.395	.223
Linear-by-Linear Association	1.083	1	.298		
N of Valid Cases	57				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.84.

b. Computed only for a 2x2 table

CT * Sesak

Crosstab

			Sesak	
			ya	tidak
CT >30	Count	32	60	
	% of Total	69.5%	69.7%	
CT <=30	Count	14	26	
	% of Total	30.4%	30.2%	
Total	Count	46	86	
	% of Total	100.0%	100.0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.001 ^a	1	.981		
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.001	1	.981		
Fisher's Exact Test				1.000	.566
Linear-by-Linear Association	.001	1	.981		
N of Valid Cases	132				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.94.

b. Computed only for a 2x2 table

CT * Lama_rawat_inap

Crosstab

			Lama_rawat_inap	
			<= 10	>10
CT	>30	Count	63	29
		% of Total	75.9%	59.2%
	<=30	Count	20	20
		% of Total	24.1%	40.8%
Total		Count	83	49
		% of Total	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	4.078 ^a	1	.043		
Continuity Correction ^b	3.325	1	.068		
Likelihood Ratio	4.011	1	.045		
Fisher's Exact Test				.051	.035
N of Valid Cases	132				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.85.

b. Computed only for a 2x2 table

GejalaKlinis * Lama_rawat_inap

Crosstab

			Lama_rawat_inap	
			<= 10	>10
GejalaKlinis	ringan	Count	56	30
		% of Total	67.4%	61.2%
	sedang	Count	27	19

	% of Total	32.5%	38.7%
Total	Count	83	49
	% of Total	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.529 ^a	1	.467		
Continuity Correction ^b	.290	1	.590		
Likelihood Ratio	.526	1	.468		
Fisher's Exact Test				.571	.294
N of Valid Cases	132				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.08.

b. Computed only for a 2x2 table

GejalaKlinis * CT

GejalaKlinis * CT Crosstabulation

			CT	
			>30	<=30
GejalaKlinis	ringan	Count	60	26
		% of Total	65.2%	65.0%
	sedang	Count	32	14
		% of Total	34.7%	35.0%
Total		Count	92	40
		% of Total	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.001 ^a	1	.981		
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.001	1	.981		

Fisher's Exact Test				1.000	.566
N of Valid Cases	132				

- a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.94.
b. Computed only for a 2x2 table

Jenis_kelamin * CT

Crosstab

			CT		Total
			>30	<=30	
Jenis_kelamin	L	Count	37	21	58
		% of Total	28.0%	15.9%	43.9%
	P	Count	55	19	74
		% of Total	41.7%	14.4%	56.1%
Total		Count	92	40	132
		% of Total	69.7%	30.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1.707 ^a	1	.191		
Continuity Correction ^b	1.245	1	.264		
Likelihood Ratio	1.700	1	.192		
Fisher's Exact Test				.252	.132
N of Valid Cases	132				

- a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.58.
b. Computed only for a 2x2 table

Usia * CT

Crosstab

	CT	Total

			>30	<=30	
Usia	<20	Count	8	2	10
		% of Total	6.1%	1.5%	7.6%
	20-29	Count	17	8	25
		% of Total	12.9%	6.1%	18.9%
	30-39	Count	19	5	24
		% of Total	14.4%	3.8%	18.2%
	40-49	Count	14	4	18
		% of Total	10.6%	3.0%	13.6%
	50-59	Count	16	10	26
		% of Total	12.1%	7.6%	19.7%
	>=60	Count	18	11	29
		% of Total	13.6%	8.3%	22.0%
Total		Count	92	40	132
		% of Total	69.7%	30.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	3.731 ^a	5	.589
Likelihood Ratio	3.813	5	.577
Linear-by-Linear Association	1.629	1	.202
N of Valid Cases	132		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is 3.03.

Komorbid * CT

Crosstab

			CT		Total
			>30	<=30	
Komorbid	Anemia Aplastik	Count	0	1	1
		% of Total	0.0%	0.8%	0.8%

CHF	Count	0	1	1
	% of Total	0.0%	0.8%	0.8%
CKD	Count	4	1	5
	% of Total	3.0%	0.8%	3.8%
DHF	Count	1	0	1
	% of Total	0.8%	0.0%	0.8%
Dispepsia	Count	1	0	1
	% of Total	0.8%	0.0%	0.8%
DM	Count	2	0	2
	% of Total	1.5%	0.0%	1.5%
DM Tipe 2	Count	1	1	2
	% of Total	0.8%	0.8%	1.5%
HT	Count	2	0	2
	% of Total	1.5%	0.0%	1.5%
Melena	Count	0	1	1
	% of Total	0.0%	0.8%	0.8%
TB	Count	0	1	1
	% of Total	0.0%	0.8%	0.8%
Tidak ada	Count	80	33	113
	% of Total	60.6%	25.0%	85.6%
Trauma Oculi Perfora	Count	1	0	1
	% of Total	0.8%	0.0%	0.8%
Tumor	Count	0	1	1
	% of Total	0.0%	0.8%	0.8%
Total	Count	92	40	132
	% of Total	69.7%	30.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	15.227 ^a	12	.229
Likelihood Ratio	17.668	12	.126
N of Valid Cases	132		

a. 24 cells (92.3%) have expected count less than 5. The minimum expected count is .30.

GejalaKlinis * CT

Crosstab

			CT		Total
			>30	<=30	
GejalaKlinis	ringan	Count	60	26	86
		% of Total	45.5%	19.7%	65.2%
	sedang	Count	32	14	46
		% of Total	24.2%	10.6%	34.8%
Total		Count	92	40	132
		% of Total	69.7%	30.3%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.001 ^a	1	.981		
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.001	1	.981		
Fisher's Exact Test				1.000	.566
N of Valid Cases	132				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 13.94.

b. Computed only for a 2x2 table