

LAMPIRAN

Lampiran 1.

Surat Ijin Penelitian



DEPARTEMEN FARMAKOLOGI DAN TERAPI
FAKULTAS KEDOKTERAN UNIVERSITAS GADJAH MADA YOGYAKARTA
 Gedung Radiopetro Lt. II Sayap Timur Jl. Farmako, Sekip Utara Yogyakarta 55281
 Telp. (0274) 6492491, 511103, Fax.: (0274) 511103

Nomor : UGM/KU/FAR/362/M/05/08/10.17

2 Oktober 2017

Hal : Permohonan ijin penelitian dan Pengambilan Data

Yth : Dekan Fakultas Kedokteran dan Ilmu Kesehatan
 Universitas Muhammadiyah Yogyakarta.
 Yogyakarta

Dengan hormat,

Menanggapi surat Saudara tanggal 22 September 2017 perihal : Permohonan ijin penggunaan fasilitas Laboratorium Farmakologi dan Terapi FK UGM, tujuan penggunaan fasilitas tersebut untuk melakukan penelitian dengan judul " Efektivitas Analgetik Ekstrak Batang Serai (*Cymbopogon citratus*) pada Tikus Wistar Jantan yang Diinduksi Karagenin"

Bagi mahasiswa :

Nama : Alfin Hidayatullah SR

NIM : 20150310196

Dengan ini kami dapat menyetujui dengan catatan :

1. Penelitian mulai dilakukan setelah mendapatkan "Ethical approval" dari Komisi Etik.
2. Mentaati peraturan yang berlaku di FK UGM Departemen Farmakologi dan Terapi
3. Dalam melakukan kegiatan dibantu pembantu pelaksana sdr : Suroso
4. Menulis semua kegiatan dan hasil Penelitian yang dilakukan di laboratorium dalam buku Log Penelitian, buku Log ditinggal di Laboratorium.
5. Setelah selesai melaporkan hasilnya kepada Ketua Departemen Farmakologi dan Terapi Fakultas Kedokteran UGM.

Demikian atas perhatiannya diucapkan terima kasih.



Ketua Departemen,
 Dr. dr. Eti Nurwening S.M.Kes.,M.Med.Ed.
 NIP. 196911021996012001

TEMBUSAN KEPADA :

1. Yth. Alfin Hidayatullah SR
2. Dr. Imaniar Ranti, M.Sc.
3. Yth Sdr .Suroso

Lampiran 2.

Surat Keterangan Telah Melakukan Penelitian



DEPARTEMEN FARMAKOLOGI DAN TERAPI
FAKULTAS KEDOKTERAN UNIVERSITAS GADJAH MADA YOGYAKARTA
 Gedung Radiopoetro Lt. II Sayap Timur Jl. Farmako, Sekip Utara Yogyakarta 55281
 Telp. (0274) 6492491, 511103, Fax.: (0274) 511103

SURAT KETERANGAN

Nomor : UGM/KU/FAR/426/M/05/09/11.17

Yang bertanda tangan di bawah ini :

N a m a : Dr. dr. Eti Nurwening Sholikhah, M.Kes., M.Med.Ed
 N I P : 196911021996012001
 Jabatan : Ketua Departemen Farmakologi dan Terapi
 Fakultas Kedokteran UGM

dengan ini menerangkan bahwa :

N a m a : Alfian Hidayatullah S.R
 N I M : 20150310176
 Program Studi : S1 Fakultas Kedokteran UGM

telah melakukan penelitian pada tanggal 15 November – 22 November 2017 di Departemen Farmakologi dan Terapi FK UGM dan telah menyelesaikan semua kewajiban sebagai peneliti serta tidak mempunyai tanggungan pengembalian alat/bahan.

Demikian surat keterangan ini agar dapat dipergunakan sebagaimana mestinya.

Yogyakarta, 28 November 2017

Ketua Departemen,



Dr. dr. Eti Nurwening S, M.Kes., M.Med.Ed *ey*
 NIP : 196911021996012001

Lampiran 3.

Lembar Etik



Fakultas Kedokteran dan Ilmu Kesehatan
Universitas Muhammadiyah Yogyakarta

Nomor : 598/EP-FKIK-UMY/XI/2017

KETERANGAN LOLOS UJI ETIK
ETHICAL APPROVAL

Komite Etik Penelitian Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta dalam upaya melindungi hak asasi dan kesejahteraan responden/subyek penelitian, telah mengkaji dengan teliti protokol berjudul :

The Ethics Committee of the Faculty of Medicine and Health Sciences, University of Muhammadiyah Yogyakarta, with regards of the protection of human rights and welfare in research, has carefully reviewed the research protocol entitled :

**“Efektivitas Analgetik Ekstrak Batang Serai (*Cymbopogon citratus*)
Pada Tikus Wistar Jantan Yang Diinduksi Karagenin”**

Peneliti Utama : Alfin Hidayatullah Sidi Rachmad
Principal Investigator

Nama Institusi : Program Studi Pendidikan Dokter FKIK UMY
Name of the Institution

Negara : Indonesia
Country

Dan telah menyetujui protokol tersebut diatas.
And approved the above-mentioned protocol.

Yogyakarta, 14 November 2017

Sekretaris
Secretary

Dr. dr. Titiek Hidayati, M.Kes.

*Peneliti Berkewajiban :

1. Menjaga kerahasiaan identitas subyek penelitian
2. Memberitahukan status penelitian apabila :
 - a. Setelah masa berlakunya keterangan lolos uji etik, penelitian masih belum selesai, dalam hal ini *ethical clearance* harus diperpanjang
 - b. Penelitian berhenti di tengah jalan
3. Melaporkan kejadian serius yang tidak diinginkan (*serious adverse events*)
4. Peneliti tidak boleh melakukan tindakan apapun pada responden/subyek sebelum penelitian lolos uji etik

Kampus: 

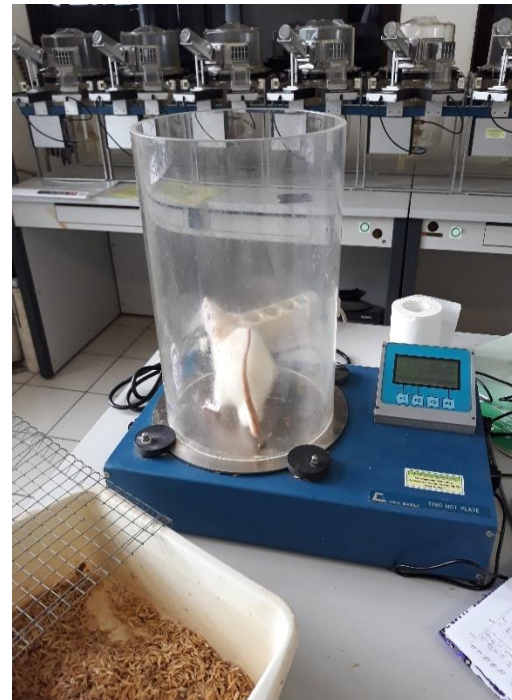
Muda mendunia

Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183
Telp. (0274) 387656 ext. 213, 7491350 Fax. (0274) 387658

Lampiran 4.

Dokumentasi





Lampiran 5.

Statistik

Berat Tikus Kelompok 1

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 1 Hari Ke 1	Mean		200.00	12.300
	95% Confidence Interval for Mean	Lower Bound	165.85	
		Upper Bound	234.15	
	5% Trimmed Mean		200.11	
	Median		193.00	
	Variance		756.500	
	Std. Deviation		27.505	
	Minimum		168	
	Maximum		230	
	Range		62	
	Interquartile Range		54	
	Skewness		.155	.913
	Kurtosis		-2.545	2.000
	Mean		225.00	13.058
Kelompok 1 Hari Ke 7	95% Confidence Interval for Mean	Lower Bound	188.75	
		Upper Bound	261.25	
	5% Trimmed Mean		225.06	
	Median		219.00	
	Variance		852.500	
	Std. Deviation		29.198	
	Minimum		191	
	Maximum		258	
	Range		67	
	Interquartile Range		57	
	Skewness		.136	.913
	Kurtosis		-2.470	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 1 Hari Ke 1	.237	5	.200*	.896	5	.388
Kelompok 1 Hari Ke 7	.222	5	.200*	.916	5	.502

*. This is a lower bound of the true significance.

a. Lilliefers Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus	Hari Ke 1	5	200.00	27.505	12.300
Kelompok 1	Hari Ke 7	5	225.00	29.198	13.058

Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Berat Tikus	Equal variances assumed	.030	.867	-1.394	8	.201	-25.000	17.939	-66.367	16.367
Kelompok 1	Equal variances not assumed			-1.394	7.972	.201	-25.000	17.939	-66.393	16.393

Berat Tikus Kelompok 2

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 2 Hari Ke 1	Mean		221.20	14.783
	95% Confidence Interval for Mean	Lower Bound	180.16	
		Upper Bound	262.24	
	5% Trimmed Mean		219.61	
	Median		213.00	
	Variance		1092.700	
	Std. Deviation		33.056	
	Minimum		194	
	Maximum		277	
	Range		83	
	Interquartile Range		53	
	Skewness		1.656	.913
	Kurtosis		2.939	2.000
	Mean		245.00	12.617
Kelompok 2 Hari Ke 7	95% Confidence Interval for Mean	Lower Bound	209.97	
		Upper Bound	280.03	
	5% Trimmed Mean		243.83	
	Median		232.00	
	Variance		796.000	
	Std. Deviation		28.213	
	Minimum		220	
	Maximum		291	
	Range		71	
	Interquartile Range		47	
	Skewness		1.419	.913
	Kurtosis		1.765	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 2 Hari Ke 1	.290	5	.195	.837	5	.156
Kelompok 2 Hari Ke 7	.278	5	.200*	.866	5	.249

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 2	Hari Ke 1	5	221.20	33.056	14.783
	Hari Ke 7	5	245.00	28.213	12.617

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Berat Tikus Kelompok 2	.015	.905	-1.225	8	.256	-23.800	19.436	-68.618	21.018
Kelompok 2			-1.225	7.807	.256	-23.800	19.436	-68.812	21.212

Berat Tikus Kelompok 3

Uji Normalitas

Descriptives

		Statistic	Std. Error
Kelompok 3 Hari Ke 1	Mean	203.20	9.151
		Lower Bound	177.79
	95% Confidence Interval for Mean	Upper Bound	228.61
	5% Trimmed Mean	202.72	
	Median	206.00	
	Variance	418.700	
	Std. Deviation	20.462	
	Minimum	182	
	Maximum	233	
	Range	51	
	Interquartile Range	37	
	Skewness	.587	.913
	Kurtosis	-.304	2.000
	Mean	221.20	10.575
Kelompok 3 Hari Ke 7		Lower Bound	191.84
	95% Confidence Interval for Mean	Upper Bound	250.56
	5% Trimmed Mean	220.33	
	Median	213.00	
	Variance	559.200	
	Std. Deviation	23.647	
	Minimum	199	
	Maximum	259	
	Range	60	
	Interquartile Range	41	
	Skewness	1.259	.913
	Kurtosis	1.321	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 3 Hari Ke 1	.200	5	.200*	.929	5	.591
Kelompok 3 Hari Ke 7	.236	5	.200*	.903	5	.428

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 3	Hari Ke 1	5	203.20	20.462	9.151
	Hari Ke 7	5	221.20	23.647	10.575

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Berat Tikus Kelompok 3	.108	.751	-1.287	8	.234	-18.000	13.985	-50.249	14.249	
			-1.287	7.838	.235	-18.000	13.985	-50.366	14.366	

Berat Tikus Kelompok 4

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 4 Hari Ke 1	Mean		234.40	13.721
	95% Confidence Interval for Mean	Lower Bound	196.30	
		Upper Bound	272.50	
	5% Trimmed Mean		232.61	
	Median		227.00	
	Variance		941.300	
	Std. Deviation		30.681	
	Minimum		213	
	Maximum		288	
	Range		75	
	Interquartile Range		44	
	Skewness		1.981	.913
	Kurtosis		4.108	2.000
	Mean		253.60	12.135
Kelompok 4 Hari Ke 7	95% Confidence Interval for Mean	Lower Bound	219.91	
		Upper Bound	287.29	
	5% Trimmed Mean		251.67	
	Median		241.00	
	Variance		736.300	
	Std. Deviation		27.135	
	Minimum		240	
	Maximum		302	
	Range		62	
	Interquartile Range		34	
	Skewness		2.205	.913
	Kurtosis		4.881	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 4 Hari Ke 1	.383	5	.016	.739	5	.023
Kelompok 4 Hari Ke 7	.424	5	.004	.611	5	.001

a. Lilliefors Significance Correction

Uji Mann Whitney

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Berat Tikus Kelompok 4	Hari Ke 1	5	3.80	19.00
	Hari Ke 7	5	7.20	36.00
	Total	10		

Test Statistics^a

	Berat Tikus Kelompok 4
Mann-Whitney U	4.000
Wilcoxon W	19.000
Z	-1.781
Asymp. Sig. (2-tailed)	.075
Exact Sig. [2*(1-tailed Sig.)]	.095 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

Berat Tikus Kelompok 5

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 5 Hari Ke 1	Mean		233.40	10.381
	95% Confidence Interval for	Lower Bound	204.58	
	Mean	Upper Bound	262.22	
	5% Trimmed Mean		233.00	
	Median		235.00	
	Variance		538.800	
	Std. Deviation		23.212	
	Minimum		207	
	Maximum		267	
	Range		60	
	Interquartile Range		42	
	Skewness		.519	.913
	Kurtosis		-.095	2.000
	Mean		256.20	9.047
Kelompok 5 Hari Ke 7	95% Confidence Interval for	Lower Bound	231.08	
	Mean	Upper Bound	281.32	
	5% Trimmed Mean		255.89	
	Median		260.00	
	Variance		409.200	
	Std. Deviation		20.229	
	Minimum		234	
	Maximum		284	
	Range		50	
	Interquartile Range		38	
	Skewness		.301	.913
	Kurtosis		-1.045	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 5 Hari Ke 1	.172	5	.200*	.968	5	.861
Kelompok 5 Hari Ke 7	.202	5	.200*	.942	5	.680

*. This is a lower bound of the true significance.

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 5	Hari Ke 1	5	233.40	23.212	10.381
	Hari Ke 7	5	256.20	20.229	9.047

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Berat Tikus Kelompok 5	.034	.858	-1.656	8	.136	-22.800	13.770	-54.553	8.953	
			-1.656	7.853	.137	-22.800	13.770	-54.656	9.056	

Kelompok 1 Efek Analgetik

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 1 Menit ke 15	Mean		29.7800	13.62077
	95% Confidence Interval for Mean	Lower Bound	-8.0373	
		Upper Bound	67.5973	
	5% Trimmed Mean		28.1944	
	Median		17.1000	
	Variance		927.627	
	Std. Deviation		30.45697	
	Minimum		7.40	
	Maximum		80.70	
	Range		73.30	
	Interquartile Range		49.50	
	Skewness		1.621	.913
	Kurtosis		2.440	2.000
	Mean		20.7400	4.20293
Kelompok 1 Menit Ke 30	95% Confidence Interval for Mean	Lower Bound	9.0708	
		Upper Bound	32.4092	
	5% Trimmed Mean		20.5889	
	Median		20.7000	
	Variance		88.323	
	Std. Deviation		9.39803	
	Minimum		10.50	
	Maximum		33.70	
	Range		23.20	
	Interquartile Range		17.80	
	Skewness		.396	.913
	Kurtosis		-1.110	2.000
	Mean		14.5600	2.23777
	Kelompok 1 Menit Ke 60	95% Confidence Interval for Mean	Lower Bound	8.3470
		Upper Bound	20.7730	
5% Trimmed Mean			14.2111	
Median			12.5000	
Variance			25.038	
Std. Deviation			5.00380	

Kelompok 1 Menit Ke 90	Minimum		11.90	
	Maximum		23.50	
	Range		11.60	
	Interquartile Range		5.85	
	Skewness		2.222	.913
	Kurtosis		4.952	2.000
	Mean		15.6800	2.80703
	95% Confidence Interval for Mean	Lower Bound	7.8864	
		Upper Bound	23.4736	
	5% Trimmed Mean		15.7500	
	Median		17.2000	
	Variance		39.397	
	Std. Deviation		6.27670	
	Minimum		7.20	
	Maximum		22.90	
	Range		15.70	
	Interquartile Range		11.80	
	Skewness		-.408	.913
	Kurtosis		-1.248	2.000

Uji Kruskal Wallis

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 1 Menit ke 15	.261	5	.200*	.813	5	.103
Kelompok 1 Menit Ke 30	.189	5	.200*	.960	5	.805
Kelompok 1 Menit Ke 60	.460	5	.001	.597	5	.001
Kelompok 1 Menit Ke 90	.196	5	.200*	.967	5	.853

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Test Statistics^{a,b}

	Kelompok 1
Chi-Square	1.149
df	3
Asymp. Sig.	.765

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

Kelompok 2 Efek Analgetik

Uji Normalitas

Descriptives

		Statistic	Std. Error
Kelompok 2 Menit ke 15	Mean	22.0400	3.38240
	95% Confidence Interval for Mean		
	Lower Bound	12.6490	
	Upper Bound	31.4310	
	5% Trimmed Mean	21.8000	
	Median	17.3000	
	Variance	57.203	
	Std. Deviation	7.56327	
	Minimum	15.60	
	Maximum	32.80	
	Range	17.20	
	Interquartile Range	13.55	
	Skewness	.870	.913
	Kurtosis	-1.566	2.000
Kelompok 2 Menit Ke 30	Mean	18.5600	1.92863
	95% Confidence Interval for Mean		
	Lower Bound	13.2053	
	Upper Bound	23.9147	
	5% Trimmed Mean	18.3333	
	Median	17.5000	
	Variance	18.598	
	Std. Deviation	4.31254	
	Minimum	15.30	
	Maximum	25.90	
	Range	10.60	
	Interquartile Range	6.75	

Kelompok 2 Menit Ke 60	Skewness		1.733	.913
	Kurtosis		3.180	2.000
	Mean		14.3000	2.26936
	95% Confidence Interval for Mean	Lower Bound	7.9992	
		Upper Bound	20.6008	
	5% Trimmed Mean		14.4222	
	Median		15.6000	
	Variance		25.750	
	Std. Deviation		5.07445	
	Minimum		7.40	
	Maximum		19.00	
	Range		11.60	
	Interquartile Range		9.75	
	Skewness		-.575	.913
Kelompok 2 Menit Ke 90	Kurtosis		-1.812	2.000
	Mean		16.9400	4.55978
	95% Confidence Interval for Mean	Lower Bound	4.2800	
		Upper Bound	29.6000	
	5% Trimmed Mean		16.8944	
	Median		12.6000	
	Variance		103.958	
	Std. Deviation		10.19598	
	Minimum		5.20	
	Maximum		29.50	
	Range		24.30	
	Interquartile Range		19.05	
	Skewness		.313	.913
	Kurtosis		-2.152	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 2 Menit ke 15	.335	5	.070	.835	5	.151
Kelompok 2 Menit Ke 30	.306	5	.143	.806	5	.091
Kelompok 2 Menit Ke 60	.207	5	.200*	.898	5	.398
Kelompok 2 Menit Ke 90	.265	5	.200*	.913	5	.484

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji One Way Anova

Descriptives

Kelompok 2

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Menit ke 15	5		
Menit Ke 30	5	18.5600	4.31254	1.92863	13.2053	23.9147	15.30	25.90
Menit Ke 60	5	14.3000	5.07445	2.26936	7.9992	20.6008	7.40	19.00
Menit Ke 90	5	16.9400	10.19598	4.55978	4.2800	29.6000	5.20	29.50
Total	20	17.9600	7.17909	1.60529	14.6001	21.3199	5.20	32.80

Test of Homogeneity of Variances

Kelompok 2

Levene Statistic	df1	df2	Sig.
3.719	3	16	.033

ANOVA

Kelompok 2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	157.212	3	52.404	1.020	.410
Within Groups	822.036	16	51.377		
Total	979.248	19			

Kelompok 3 Efek Analgetik

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 3 Menit ke 15	Mean		38.8600	8.56782
	95% Confidence Interval for	Lower Bound	15.0719	
	Mean	Upper Bound	62.6481	
	5% Trimmed Mean		38.9722	
	Median		35.4000	
	Variance		367.038	
	Std. Deviation		19.15824	
	Minimum		17.10	
	Maximum		58.60	
	Range		41.50	
	Interquartile Range		37.75	
	Skewness		.127	.913
	Kurtosis		-2.717	2.000
	Mean		18.6000	5.07563
Kelompok 3 Menit Ke 30	95% Confidence Interval for	Lower Bound	4.5078	
	Mean	Upper Bound	32.6922	
	5% Trimmed Mean		18.0556	
	Median		15.4000	
	Variance		128.810	
	Std. Deviation		11.34945	
	Minimum		9.10	
	Maximum		37.90	
	Range		28.80	
	Interquartile Range		17.60	
	Skewness		1.717	.913
	Kurtosis		3.209	2.000
	Mean		30.0800	5.84871
	Kelompok 3 Menit Ke 60	95% Confidence Interval for	Lower Bound	13.8414
Mean		Upper Bound	46.3186	
5% Trimmed Mean			30.0444	
Median			26.4000	
Variance			171.037	
Std. Deviation			13.07811	

	Minimum		16.40	
	Maximum		44.40	
	Range		28.00	
	Interquartile Range		25.70	
	Skewness		.295	.913
	Kurtosis		-2.935	2.000
	Mean		26.8400	8.31959
	95% Confidence Interval for Mean	Lower Bound	3.7411	
		Upper Bound	49.9389	
	5% Trimmed Mean		26.1833	
	Median		18.1000	
	Variance		346.078	
Kelompok 3 Menit Ke 90	Std. Deviation		18.60317	
	Minimum		10.90	
	Maximum		54.60	
	Range		43.70	
	Interquartile Range		33.65	
	Skewness		.995	.913
	Kurtosis		-.621	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 3 Menit ke 15	.249	5	.200*	.872	5	.276
Kelompok 3 Menit Ke 30	.304	5	.149	.831	5	.140
Kelompok 3 Menit Ke 60	.244	5	.200*	.860	5	.229
Kelompok 3 Menit Ke 90	.281	5	.200*	.872	5	.274

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji One Way Anova

Descriptives

Kelompok 3

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Menit ke 15	5	38.8600	19.15824	8.56782	15.0719	62.6481	17.10	58.60
Menit Ke 30	5	18.6000	11.34945	5.07563	4.5078	32.6922	9.10	37.90
Menit Ke 60	5	30.0800	13.07811	5.84871	13.8414	46.3186	16.40	44.40
Menit Ke 90	5	26.8400	18.60317	8.31959	3.7411	49.9389	10.90	54.60
Total	20	28.5950	16.39099	3.66514	20.9238	36.2662	9.10	58.60

Test of Homogeneity of Variances

Kelompok 3

Levene Statistic	df1	df2	Sig.
1.549	3	16	.241

ANOVA

Kelompok 3

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1052.777	3	350.926	1.386	.283
Within Groups	4051.852	16	253.241		
Total	5104.629	19			

Kelompok 4 Efek Analgetik

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 4 Menit ke 15	Mean		28.2800	10.22778
	95% Confidence Interval for	Lower Bound	-.1169	
	Mean	Upper Bound	56.6769	
	5% Trimmed Mean		27.2889	
	Median		19.8000	
	Variance		523.037	
	Std. Deviation		22.87000	
	Minimum		8.40	
	Maximum		66.00	
	Range		57.60	
	Interquartile Range		37.70	
	Skewness		1.490	.913
	Kurtosis		2.144	2.000
	Mean		19.4200	2.79668
Kelompok 4 Menit Ke 30	95% Confidence Interval for	Lower Bound	11.6552	
	Mean	Upper Bound	27.1848	
	5% Trimmed Mean		19.0667	
	Median		17.1000	
	Variance		39.107	
	Std. Deviation		6.25356	
	Minimum		14.80	
	Maximum		30.40	
	Range		15.60	
	Interquartile Range		8.50	
	Skewness		2.028	.913
	Kurtosis		4.323	2.000
	Mean		21.3800	9.48564
	Kelompok 4 Menit Ke 60	95% Confidence Interval for	Lower Bound	-4.9564
Mean		Upper Bound	47.7164	
5% Trimmed Mean			20.2278	
Median			13.3000	
Variance			449.887	
Std. Deviation			21.21054	

Kelompok 4 Menit Ke 90	Minimum		5.10	
	Maximum		58.40	
	Range		53.30	
	Interquartile Range		29.70	
	Skewness		1.966	.913
	Kurtosis		4.108	2.000
	Mean		28.1800	10.57045
	95% Confidence Interval for Mean	Lower Bound	-1.1683	
		Upper Bound	57.5283	
	5% Trimmed Mean		26.7222	
	Median		20.5000	
	Variance		558.672	
	Std. Deviation		23.63624	
	Minimum		12.90	
	Maximum		69.70	
	Range		56.80	
	Interquartile Range		33.20	
	Skewness		2.041	.913
	Kurtosis		4.293	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 4 Menit ke 15	.245	5	.200*	.867	5	.253
Kelompok 4 Menit Ke 30	.384	5	.015	.733	5	.020
Kelompok 4 Menit Ke 60	.361	5	.032	.757	5	.034
Kelompok 4 Menit Ke 90	.375	5	.020	.718	5	.015

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji Kruskal Wallis

Ranks

	Kelompok	N	Mean Rank
Kelompok 4	Menit ke 15	5	11.60
	Menit Ke 30	5	10.90
	Menit Ke 60	5	7.70
	Menit Ke 90	5	11.80
	Total	20	

Test Statistics^{a,b}

	Kelompok 4
Chi-Square	1.558
df	3
Asymp. Sig.	.669

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

Kelompok 5 Efek Analgetik

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 5 Menit ke 15	Mean		21.0000	3.44891
	95% Confidence Interval for	Lower Bound	11.4243	
	Mean	Upper Bound	30.5757	
	5% Trimmed Mean		21.0722	
	Median		21.5000	
	Variance		59.475	
	Std. Deviation		7.71200	
	Minimum		10.80	
	Maximum		29.90	
	Range		19.10	
	Interquartile Range		14.75	
	Skewness		-.264	.913
	Kurtosis		-1.423	2.000
	Mean		18.6000	5.56911
Kelompok 5 Menit Ke 30	95% Confidence Interval for	Lower Bound	3.1377	
	Mean	Upper Bound	34.0623	
	5% Trimmed Mean		17.9500	
	Median		15.0000	
	Variance		155.075	
	Std. Deviation		12.45291	
	Minimum		8.80	
	Maximum		40.10	
	Range		31.30	
	Interquartile Range		18.50	
	Skewness		1.860	.913
	Kurtosis		3.713	2.000
	Mean		20.3000	7.34418
	Kelompok 5 Menit Ke 60	95% Confidence Interval for	Lower Bound	-.0907
Mean		Upper Bound	40.6907	
5% Trimmed Mean			19.6556	
Median			15.5000	
Variance			269.685	
Std. Deviation			16.42209	

Kelompok 5 Menit Ke 90	Minimum		5.80	
	Maximum		46.40	
	Range		40.60	
	Interquartile Range		28.70	
	Skewness		1.233	.913
	Kurtosis		1.088	2.000
	Mean		18.5800	4.75641
	95% Confidence Interval for Mean	Lower Bound	5.3741	
		Upper Bound	31.7859	
	5% Trimmed Mean		18.1611	
	Median		17.1000	
	Variance		113.117	
	Std. Deviation		10.63565	
	Minimum		9.00	
	Maximum		35.70	
	Range		26.70	
	Interquartile Range		18.20	
Skewness		1.265	.913	
Kurtosis		1.593	2.000	

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 5 Menit ke 15	.166	5	.200*	.972	5	.887
Kelompok 5 Menit Ke 30	.338	5	.063	.793	5	.071
Kelompok 5 Menit Ke 60	.215	5	.200*	.893	5	.373
Kelompok 5 Menit Ke 90	.232	5	.200*	.892	5	.366

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Uji One Way Anova

Descriptives

Kelompok 5

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Menit ke 15	5	21.0000	7.71200	3.44891	11.4243	30.5757	10.80	29.90
Menit Ke 30	5	18.6000	12.45291	5.56911	3.1377	34.0623	8.80	40.10
Menit Ke 60	5	20.3000	16.42209	7.34418	-.0907	40.6907	5.80	46.40
Menit Ke 90	5	18.5800	10.63565	4.75641	5.3741	31.7859	9.00	35.70
Total	20	19.6200	11.26675	2.51932	14.3470	24.8930	5.80	46.40

Test of Homogeneity of Variances

Kelompok 5

Levene Statistic	df1	df2	Sig.
.772	3	16	.527

ANOVA

Kelompok 5

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.444	3	7.481	.050	.985
Within Groups	2389.408	16	149.338		
Total	2411.852	19			