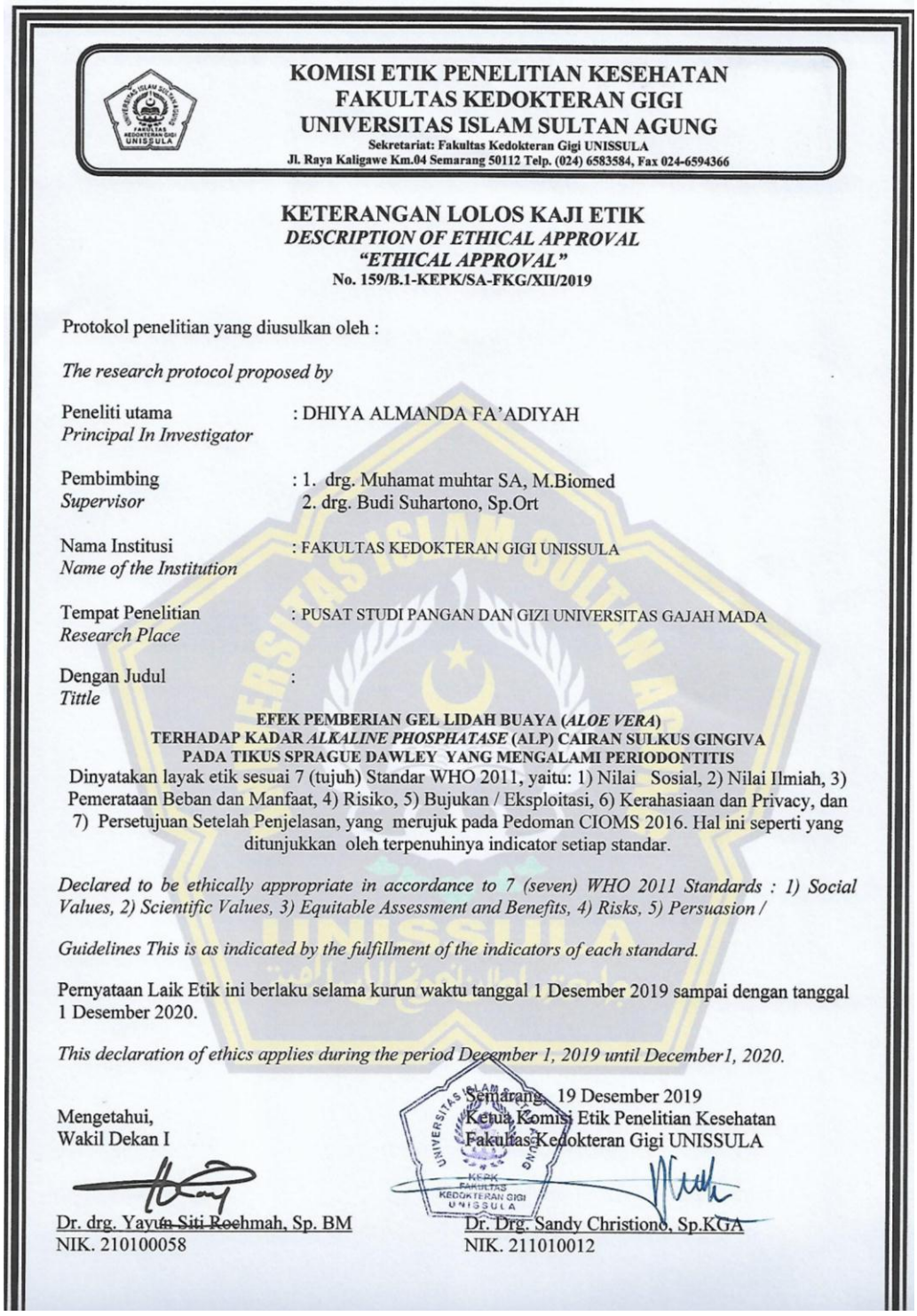
LAMPIRAN

Lampiran 1. *Ethical Clearance*



KOMISI ETIK PENELITIAN KESEHATAN
FAKULTAS KEDOKTERAN GIGI
UNIVERSITAS ISLAM SULTAN AGUNG
Sekretariat: Fakultas Kedokteran Gigi UNISSULA
Jl. Raya Kaligawe Km.04 Semarang 50112 Telp. (024) 6583584, Fax 024-6594366

KETERANGAN LOLOS KAJI ETIK
DESCRIPTION OF ETHICAL APPROVAL
"ETHICAL APPROVAL"
No. 159/B.1-KEPK/SA-FKG/XII/2019

Protokol penelitian yang diusulkan oleh :

The research protocol proposed by

Peneliti utama : DHIYA ALMANDA FA'ADIYAH
Principal In Investigator

Pembimbing : 1. drg. Muhamat muhtar SA, M.Biomed
Supervisor 2. drg. Budi Suhartono, Sp.Ort

Nama Institusi : FAKULTAS KEDOKTERAN GIGI UNISSULA
Name of the Institution

Tempat Penelitian : PUSAT STUDI PANGAN DAN GIZI UNIVERSITAS GAJAH MADA
Research Place

Dengan Judul :
Tittle

EFEK PEMBERIAN GEL LIDAH BUAYA (*ALOE VERA*)
TERHADAP KADAR *ALKALINE PHOSPHATASE* (ALP) CAIRAN SULKUS GINGIVA
PADA TIKUS SPRAGUE DAWLEY YANG MENGALAMI PERIODONTITIS

Dinyatakan layak etik sesuai 7 (tujuh) Standar WHO 2011, yaitu: 1) Nilai Sosial, 2) Nilai Ilmiah, 3) Pemerataan Beban dan Manfaat, 4) Risiko, 5) Bujukan / Eksploitasi, 6) Kerahasiaan dan Privacy, dan 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukkan oleh terpenuhinya indicator setiap standar.

Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 Standards : 1) Social Values, 2) Scientific Values, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion / Guidelines This is as indicated by the fulfillment of the indicators of each standard.

Pernyataan Laik Etik ini berlaku selama kurun waktu tanggal 1 Desember 2019 sampai dengan tanggal 1 Desember 2020.

This declaration of ethics applies during the period December 1, 2019 until December1, 2020.

Semarang, 19 Desember 2019
Ketua Komisi Etik Penelitian Kesehatan
Fakultas Kedokteran Gigi UNISSULA

Mengetahui,
Wakil Dekan I

Dr. drg. Yayun Siti Rochmah, Sp. BM
NIK. 210100058

Dr. Drg. Sandy Christiono, Sp.KGA
NIK. 211010012

Lampiran 2. Surat Ijin Penelitian PSPG UGM

YAYASAN BADAN WAKAF SULTAN AGUNG
UNIVERSITAS ISLAM SULTAN AGUNG (UNISSULA)
JL. Raya Kaligawe Km. 4 Semarang 50112 Telp. (024) 6583584(8 Sal) Fax. (024)6582455
email : informasi@unissula.ac.id web : www.unissula.ac.id
FAKULTAS KEDOKTERAN GIGI
Bismillah Membangun Generasi Khaira Ummah

Nomor : 009/KTI/SA-FKG/I/2020 Semarang, 8 Januari 2020
Hal : ***Ijin Penelitian***

Kepada : Kepala Pusat Studi Pangan dan Gizi
Universitas Gajah Mada (UGM)
Di –
Tempat

Assalamu 'alaikum wr wb

Dalam rangka Penelitian untuk Karya Tulis Ilmiah (KTI) Mahasiswa S1 Prodi Sarjana Kedokteran Gigi Fakultas Kedokteran Gigi Universitas Islam Sultan Agung (UNISSULA) Semarang :

Nama	: Dhiya Almanda Fa'adiyah
NIM	: 31101600574
Alamat	: Jl.Taman Kradenan Asri Blok D.29 Semarang
Judul Penelitian	: Efek Pemberian Gel Lidah Buaya (Aloe Vera) Terhadap Kadar Alkaline Phosphate (Alp) Cairan Sulkus Gingiva Pada Tikus Sprague Dawley Yang Mengalami Periodontitis
Waktu	: 1 Bulan

Bersama ini kami mohon kesediaan untuk dapat memberikan Ijin Penelitian di Pusat Studi Pangan dan Gizi Universitas Gajah Mada.

Demikian permohonan kami atas perhatian dan kerjasamanya kami ucapkan terima kasih.

Wassalamu 'alaikum wr wb

Wakil Dekan I

Dr.drg.Yayun Siti Rochmah,Sp.BM
NIK.210100058

Lampiran 3. Surat Keterangan Penelitian PSPG UGM

UNIVERSITAS GADJAH MADA
PUSAT STUDI PANGAN DAN GIZI
Alamat : Gedung PAU-UGM, Jalan Teknika Utara, Barek, Yogyakarta 55281, Phone/Fax. (0274) 589242
http://cfns.ugm.ac.id, E-mail : cfns@ugm.ac.id

No. : PSPG – UGM/02/IP/I/2019 13 Januari 2020
Hal. : *Ijin Penelitian*

Kepada :
Yth. Wakil Dekan I
Fakultas Kedokteran Gigi UNISSULA
Jl. Raya Kaligawe Km.4
Semarang 50112

Dengan hormat.

Menindaklanjuti surat Saudara : dari Dosen Pembimbing I tertanggal 12 Desember 2019 dan surat Nomor : 009/KTI/SA-FKG/I/2020 tertanggal 8 Januari 2020 perihal Ijin Penelitian di Laboratorium Gizi Pusat Studi Pangan dan Gizi Universitas Gadjah Mada, untuk bahan penulisan Karya Tulis Ilmiah (KTI) oleh mahasiswa S1 Prodi Sarjana Kedokteran Gigi Fakultas Kedokteran Gigi Universitas Islam Sultan Agung (UNISSULA) Semarang :

Nama : Dhiya Almanda Fa'adiyah
NIM : 31101600574

Institusi : Fakultas Kedokteran Gigi Universitas Islam Sultan Agung Semarang

Judul : Efek Pemberian Gel Lidah Buaya (*Aloe vera*) Terhadap Kadar Alkaline phosphatase (ALP) Cairan Sulkus Gingiva (CSG) Pada Tikus Sprague Dawley Yang Mengalami Periodontitis.

Waktu Ijin Penelitian : 1 Bulan

Dengan ini kami beritahukan bahwa permohonan ijin penelitian tersebut dapat kami setujui sesuai peraturan yang berlaku.

Demikian kami sampaikan atas perhatian dan kerjasamanya diucapkan terima kasih.

Ketua Lab. Gizi,

Dr. Siti Helmyati, DCN, M.Kes.
NIP. 197704132002122002

Lampiran 4. Foto dan Prosedur Penelitian

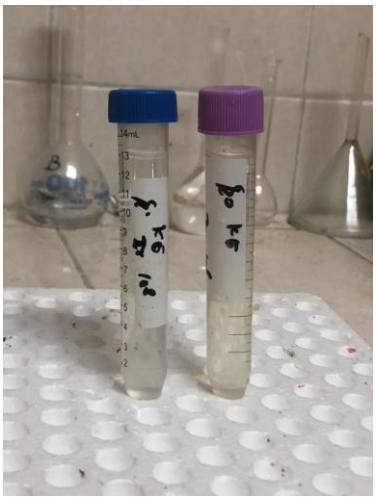
Gambar Ti-es *Metronidazole* gel plus 25%

Gambar gel lidah buaya (*Aloe Vera*)

Gambar Spektrofotometer UV-Vis 405nm

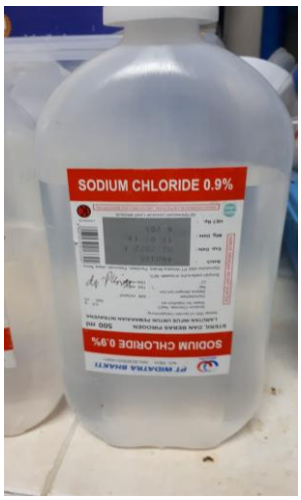
Gambar vortex

Gambar mikropipet



Gambar specimen bakteri
Porphyromonas Gingivalis

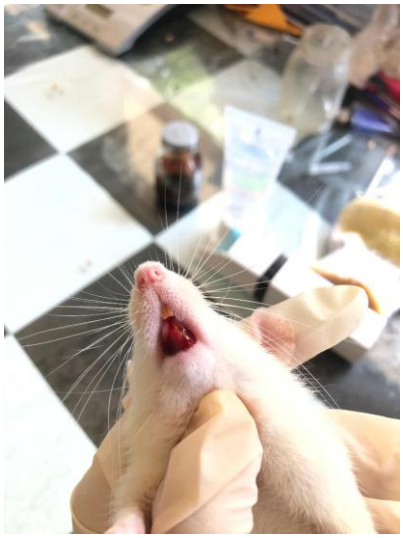
Gambar cairan sulkus gingiva (CSG)
yang terdilusi



Gambar larutan NaCl

Gambar tabung ukur ALP

Gambar infiltrasi bakteri *Porphyromonas gingivalis*



Gambar tikus perioodontitis

Gambar aplikasi gel lidah buaya (*Aloe Vera*)

Gambar aplikasi Ti-es Metronidazole gel plus 25%

Lampiran 5. Hasil Uji Statistik SPSS

UJI FRIEDMAN KELOMPOK KONTROL POSITIF

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles 25th	50th (Median)	75th
sesudah_perio	18	85,5450	1,91862	81,33	88,22	84,0900	85,4700	86,8500
pengobatan_hari_1	18	66,3989	3,60861	59,28	74,44	64,4450	66,1700	68,9300
pengobatan_hari_2	18	57,2844	3,54622	51,00	62,03	54,4500	57,9000	59,6225
pengobatan_hari_3	18	50,0861	2,31443	46,87	53,76	48,2500	49,6300	52,3800

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Residual for sesudah_perio	,151	18	,200*	,937	18	,255
Residual for pengobatan_hari_1	,136	18	,200*	,978	18	,921
Residual for pengobatan_hari_2	,180	18	,127	,923	18	,148
Residual for pengobatan_hari_3	,189	18	,088	,903	18	,064

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Hasil	Based on Mean	2,797	3	68	,047
	Based on Median	2,130	3	68	,104
	Based on Median and with adjusted df	2,130	3	54,074	,107
	Based on trimmed mean	2,634	3	68	,057

	Mean Rank
sesudah_perio	4,00
pengobatan_hari_1	2,92
pengobatan_hari_2	2,08
pengobatan_hari_3	1,00

Test Statistics[a]

N	18
Chi-Square	52,642

df	3
Asymp. Sig.	,000

a. Friedman Test

Pairwise Comparisons

Measure: obat

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	19,146*	1,103	,000	15,856	22,436
	3	28,261*	,806	,000	25,856	30,665
	4	35,459*	,638	,000	33,556	37,362
2	1	-19,146*	1,103	,000	-22,436	-15,856
	3	9,114*	1,310	,000	5,206	13,023
	4	16,313*	1,186	,000	12,775	19,850
3	1	-28,261*	,806	,000	-30,665	-25,856
	2	-9,114*	1,310	,000	-13,023	-5,206
	4	7,198*	,815	,000	4,765	9,632
4	1	-35,459*	,638	,000	-37,362	-33,556
	2	-16,313*	1,186	,000	-19,850	-12,775
	3	-7,198*	,815	,000	-9,632	-4,765

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

UJI FRIEDMAN KELOMPOK ALOE VERA

Statistics

		sesudah_perio	pengobatan_hari_1	pengobatan_hari_2	pengobatan_hari_3
N	Valid	18	18	18	18
	Missing	0	0	0	0
Mean		84,854	67,165	55,753	50,928
Std. Error of Mean		,5919	,9109	,6231	,5621
Median		84,090	67,550	55,830	51,000
Std. Deviation		2,5114	3,8644	2,6435	2,3847
Variance		6,307	14,934	6,988	5,687
Skewness		,160	2,083	,403	-,057
Std. Error of Skewness		,536	,536	,536	,536

Kurtosis	-1,555	6,968	,770	-,686
Std. Error of Kurtosis	1,038	1,038	1,038	1,038
Range	6,9	17,9	11,0	8,3
Minimum	81,3	62,0	51,0	46,9
Maximum	88,2	80,0	62,0	55,1
Sum	1527,4	1209,0	1003,5	916,7

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual for sesudah_perio	,192	18	,077	,877	18	,024
Standardized Residual for pengobatan_hari_1	,294	18	,000	,768	18	,001
Standardized Residual for pengobatan_hari_2	,164	18	,200*	,962	18	,643
Standardized Residual for pengobatan_hari_3	,151	18	,200*	,951	18	,444

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Hasil	Based on Mean	,166	3	68	,919
	Based on Median	,086	3	68	,967
	Based on Median and with adjusted df	,086	3	41,247	,967
	Based on trimmed mean	,240	3	68	,868

Ranks

	Mean Rank
sesudah_perio	4,00
pengobatan_hari_1	3,00
pengobatan_hari_2	2,00
pengobatan_hari_3	1,00

Test Statistics[a]

N	18
Chi-Square	54,000
Df	3

Asymp. Sig.	,000

a. Friedman Test

Pairwise Comparisons

Measure: obat

(I) waktu	(J) waktu	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	17,689*	1,132	,000	14,311	21,068
	3	29,102*	,826	,000	26,638	31,566
	4	33,927*	,706	,000	31,821	36,033
2	1	-17,689*	1,132	,000	-21,068	-14,311
	3	11,412*	,945	,000	8,594	14,231
	4	16,237*	,816	,000	13,804	18,671
3	1	-29,102*	,826	,000	-31,566	-26,638
	2	-11,412*	,945	,000	-14,231	-8,594
	4	4,825*	,662	,000	2,850	6,800
4	1	-33,927*	,706	,000	-36,033	-31,821
	2	-16,237*	,816	,000	-18,671	-13,804
	3	-4,825*	,662	,000	-6,800	-2,850

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

UJI MANN WHITNEY PERIODONTITIS

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
Hasil	kontrol sesudah perio	,151	18	,200*	,937	18	,255
	aloevera sesudah perio	,192	18	,077	,877	18	,024

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

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
hasil	Based on Mean	,225	1	34	,638
	Based on Median	,248	1	34	,622
	Based on Median and with adjusted df	,248	1	31,414	,622
	Based on trimmed mean	,129	1	34	,722

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
hasil	Based on Mean	4,248	1	34	,047
	Based on Median	2,443	1	34	,127
	Based on Median and with adjusted df	2,443	1	32,995	,128
	Based on trimmed mean	4,145	1	34	,050

Ranks

	perlakuan	N	Mean Rank	Sum of Ranks
hasil	kontrol sesudah perio	18	20,06	361,00
	aloevera sesudah perio	18	16,94	305,00
	Total	36		

Test Statistics[a]

	hasil
Mann-Whitney U	134,000
Wilcoxon W	305,000
Z	-,900
Asymp. Sig. (2-tailed)	,368
Exact Sig. [2*(1-tailed Sig.)]	,389[b]

a. Grouping Variable: perlakuan

b. Not corrected for ties.

UJI MANN WHITNEY KELOMPOK HARI 1 (kontrol positif dan Aloe Vera)

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
hasil	kontrol positif	,136	18	,200*	,978	18	,921
	Aloe Vera	,294	18	,000	,768	18	,001

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

a. Lilliefors Significance Correction

UJI MANN WHITNEY KELOMPOK HARI 2 (kontrol positif dan Aloe Vera)

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
hasil	kontrol positif	,180	18	,127	,923	18	,148
	Aloe Vera	,164	18	,200*	,962	18	,643

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
hasil	Based on Mean	2,256	1	34	,142
	Based on Median	1,366	1	34	,251
	Based on Median and with adjusted df	1,366	1	31,581	,251
	Based on trimmed mean	2,119	1	34	,155

T-Test

Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
hasil	kontrol positif	18	57,2844	3,54622	,83585
	aloe vera	18	55,7528	2,64346	,62307

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
hasil	Equal variances assumed	2,256	,142	1,469	34	,151	1,53167	1,04253	-,58700	3,65034
	Equal variances not assumed			1,469	31,435	,152	1,53167	1,04253	-,59339	3,65672

UJI MANN WHITNEY KELOMPOK HARI 3 (kontrol positif dan Aloe Vera)

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	perlakuan	Statistic	df	Sig.	Statistic	df	Sig.
hasil	kontrol positif	,189	18	,088	,903	18	,064

	Aloe Vera	,151	18	,200*	,951	18	,444

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
hasil	Based on Mean	,002	1	34	,967
	Based on Median	,027	1	34	,870
	Based on Median and with adjusted df	,027	1	33,919	,870
	Based on trimmed mean	,001	1	34	,980

T-Test

Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
hasil	kontrol positif	18	50,0861	2,31443	,54552
	aloe vera	18	50,9278	2,38466	,56207

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
hasil	Equal variances assumed	,002	,967	-1,075	34	,290	-,84167	,78327	-2,43346	,75013
	Equal variances not assumed			-1,075	33,970	,290	-,84167	,78327	-2,43351	,75018

UJI KORELASI SPEARMAN (hubungan kelompok aloevera dan kadar ALP)

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	aloe_vera	N	Percent	N	Percent	N	Percent
alp	setelah perio	18	100,0%	0	0,0%	18	100,0%
	hari ke 1	18	100,0%	0	0,0%	18	100,0%
	hari ke 2	18	100,0%	0	0,0%	18	100,0%
	hari ke 3	18	100,0%	0	0,0%	18	100,0%

Descriptives

	aloe_vera		Statistic	Std. Error
alp	setelah perio	Mean	84,8544	,59195

	95% Confidence Interval for Mean	Lower Bound	83,6055	
		Upper Bound	86,1033	
	5% Trimmed Mean		84,8633	
	Median		84,0900	
	Variance		6,307	
	Std. Deviation		2,51142	
	Minimum		81,33	
	Maximum		88,22	
	Range		6,89	
	Interquartile Range		4,48	
	Skewness		,160	,536
	Kurtosis		-1,555	1,038
hari ke 1	Mean		67,1650	,91085
	95% Confidence Interval for Mean	Lower Bound	65,2433	
		Upper Bound	69,0867	
	5% Trimmed Mean		66,7400	
	Median		67,5500	
	Variance		14,934	
	Std. Deviation		3,86443	
	Minimum		62,03	
	Maximum		79,95	
	Range		17,92	
	Interquartile Range		3,10	
	Skewness		2,083	,536
	Kurtosis		6,968	1,038
hari ke 2	Mean		55,7528	,62307
	95% Confidence Interval for Mean	Lower Bound	54,4382	
		Upper Bound	57,0673	
	5% Trimmed Mean		55,6681	
	Median		55,8300	
	Variance		6,988	
	Std. Deviation		2,64346	
	Minimum		51,00	
	Maximum		62,03	
	Range		11,03	

		Interquartile Range	3,11	
		Skewness	,403	,536
		Kurtosis	,770	1,038
	hari ke 3	Mean	50,9278	,56207
		95% Confidence Interval for Mean — Lower Bound	49,7419	
		95% Confidence Interval for Mean — Upper Bound	52,1136	
		5% Trimmed Mean	50,9192	
		Median	51,0000	
		Variance	5,687	
		Std. Deviation	2,38466	
		Minimum	46,87	
		Maximum	55,14	
		Range	8,27	
		Interquartile Range	3,09	
		Skewness	-,057	,536
		Kurtosis	-,686	1,038

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	aloe_vera	Statistic	df	Sig.	Statistic	df	Sig.
alp	setelah perio	,192	18	,077	,877	18	,024
	hari ke 1	,294	18	,000	,768	18	,001
	hari ke 2	,164	18	,200*	,962	18	,643
	hari ke 3	,151	18	,200*	,951	18	,444

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
alp	Based on Mean	,166	3	68	,919
	Based on Median	,086	3	68	,967
	Based on Median and with adjusted df	,086	3	41,247	,967
	Based on trimmed mean	,240	3	68	,868

Correlations

			alp	aloe_vera
Spearman's rho	alp	Correlation Coefficient	1,000	-,954**
		Sig. (2-tailed)	.	,000
		N	72	72
	aloe_vera	Correlation Coefficient	-,954**	1,000
		Sig. (2-tailed)	,000	.
		N	72	72

**. Correlation is significant at the 0.01 level (2-tailed).

"1/4-20

drg. Muhamat Mukhtar S, M.Bio Med

EFEK PEMBERIAN GEL LIDAH BUAYA (ALOE VERA) TERHADAP KADAR ALKALINE PHOSPHATASE (ALP) CAIRAN SULKUS GINGIVA (CSG) PADA TIKUS SPRAGUE DAWLEY YANG MENGALAMI PERIODONTITIS

ORIGINALITY REPORT

22%	14%	2%	18%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Sultan Agung Islamic University Student Paper	6%
2	Submitted to Universitas Muhammadiyah Surakarta Student Paper	2%
3	Submitted to Universitas Indonesia Student Paper	2%