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LAMPIRAN 1

CARA KERJA SEDIAAN HISTOPATOLOGI

1) Menyiapkan wadah yang di isi dengan larutan formalin 10% bufer dengan volume minimal 5 kali volume jaringan

2) Testis yang telah diambil, segera di masukkan kedalam wadah tersebut

3) Memberi identitas pada semua wadah dengan identitas masing-masing kelompok perlakuan

4) Dikirim ke Sentra Diagnostik Patologi Anatomi disertai dengan formulir pengantar

5) Preparat kemudian dipotong dengan keteblan maksimal 3-4 cm

6) Setelah dipotong diletakkan di dalam kaset jaringan, dan dimasukkan ke wadah yang berisi formalin 10% bufer

7) Dilakukan proses pembuatan blok parafin, kemudian didinginkan di dalam lemari es

8) Blok parafin dipotong menjadi lebih tipis menggunakan microtome sesuai kebutuhan

9) Pita parafin dimekarkan dengan ditempelkan langsung pada kaca benda yang telah dibasahi dengan air

10) Dimulai proses pengecatan dengan Hematoxylin Eosin

11) Preparat diberi cat Hematoxylin

12) Kemudian di diferensiasi menggunakan air kran

13) Diberi cat Eosin

14) Kemudian di dehidrasi menggunakan alkohol 70%

15) Pada prosesl 'clearing' menggunakan larutan xylol

16) Mouting adalah tahan terakhir yang kemudian dapat diamati di mikroskop

LAMPIRAN 2

ETHICAL CLEARANCE

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.024-8311523/Fax. 024-8446905

RSUP Dr. KARIADI

ETHICAL CLEARANCE
No.279 /EC/FK-RSDK/2014

Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Diponegoro- RSUP. Dr. Kariadi Semarang, setelah membaca dan menelaah USULAN Penelitian dengan judul :

PENGARUH PAPARAN INSEKTISIDA BAKAR BENTUK LINGKAR DAN INSEKTISIDA CAIR TERHADAP SPERMATOGENESIS TIKUS *SPRAGUE DAWLEY* DILIHAT SECARA HISTOPATOLOGIS

Peneliti Utama   :   Mohammad Ali Akbar

Pembimbing   :   1. dr. Erie BPS Andar, Sp.BS. PAK
                        2. dr. Ika Pawitra Miranti, M.Kes, Sp.PA

Penelitian   :   Dilaksanakan di Laboratorium Patologi Anatomi
                    Rumah Sakit Dr. Kariadi Semarang.

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

Pada laporan akhir peneliti harus melampirkan cara pemeliharaan & dekapitasi hewan coba dan melaporkan ke KEPK bahwa penelitian sudah selesai di lampiri Abstrak Penelitian.

Semarang,   1 4 MAY 2014

Komisi Etik Penelitian Kesehatan
Fakultas Kedokteran Undip-RSUP Dr. Kariadi
Ketua,

Prof.Dr.dr.Suprihati, M.Sc, Sp.THT-KL(K)
NIP. 19500621197703 2 001

RELIABILITY ANALYSIS

Reliability Statistics

Cronbach's Alpha	N of Items
.987	2

Intraclass Correlation Coefficient

	Intraclass Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.974[a]	.898	.993	74.800	9	9	.000
Average Measures	.987[c]	.946	.997	74.800	9	9	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

Reliability Statistics

Cronbach's Alpha	N of Items
.994	2

Intraclass Correlation Coefficient

	Intraclass Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.988[a]	.954	.997	169.571	9	9	.000
Average Measures	.994[c]	.976	.999	169.571	9	9	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

Reliability Statistics

Cronbach's Alpha	N of Items
.984	2

Intraclass Correlation Coefficient

	Intraclass Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.969[a]	.881	.992	63.464	9	9	.000
Average Measures	.984[c]	.937	.996	63.464	9	9	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

Reliability Statistics

Cronbach's Alpha	N of Items
.967	2

Intraclass Correlation Coefficient

	Intraclass Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.936[a]	.765	.984	30.259	9	9	.000
Average Measures	.967[c]	.867	.992	30.259	9	9	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

a. The estimator is the same, whether the interaction effect is present or not.

b. Type C intraclass correlation coefficients using a consistency definition-the between-measure variance is excluded from the denominator variance.

c. This estimate is computed assuming the interaction effect is absent, because it is not estimable otherwise.

LAMPIRAN4
ANALISIS DATA

KATEGORI 1

Case Summaries

Obstructive cases

PERLAKUAN	N	Mean	Std. Deviation	Median	Minimum	Maximum
grup 1	5	40.20	4.087	38.00	37	47
grup 2	5	15.20	13.609	10.00	5	39
grup 3	5	19.40	6.066	19.00	11	27
grup 4	5	21.40	6.309	19.00	16	32
grup 5	5	22.00	4.528	22.00	17	27
Total	25	23.64	11.276	22.00	5	47

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	PERLAKUAN	Statistic	df	Sig.	Statistic	df	Sig.
Obstructive cases	grup 1	.305	5	.145	.813	5	.103
	grup 2	.364	5	.029	.749	5	.029
	grup 3	.146	5	.200*	.992	5	.985
	grup 4	.262	5	.200*	.845	5	.180
	grup 5	.212	5	.200*	.897	5	.395

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Obstructive cases	Based on Mean	1.552	4	20	.226
	Based on Median	.435	4	20	.782
	Based on Median and with adjusted df	.435	4	7.431	.780
	Based on trimmed mean	1.201	4	20	.341

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	PERLAKUAN	Statistic	df	Sig.	Statistic	df	Sig.
zkategori1	grup 1	.305	5	.146	.829	5	.136
	grup 2	.249	5	.200*	.929	5	.587
	grup 3	.198	5	.200*	.958	5	.792
	grup 4	.229	5	.200*	.904	5	.434
	grup 5	.211	5	.200*	.897	5	.392

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

a. Lilliefors Significance Correction
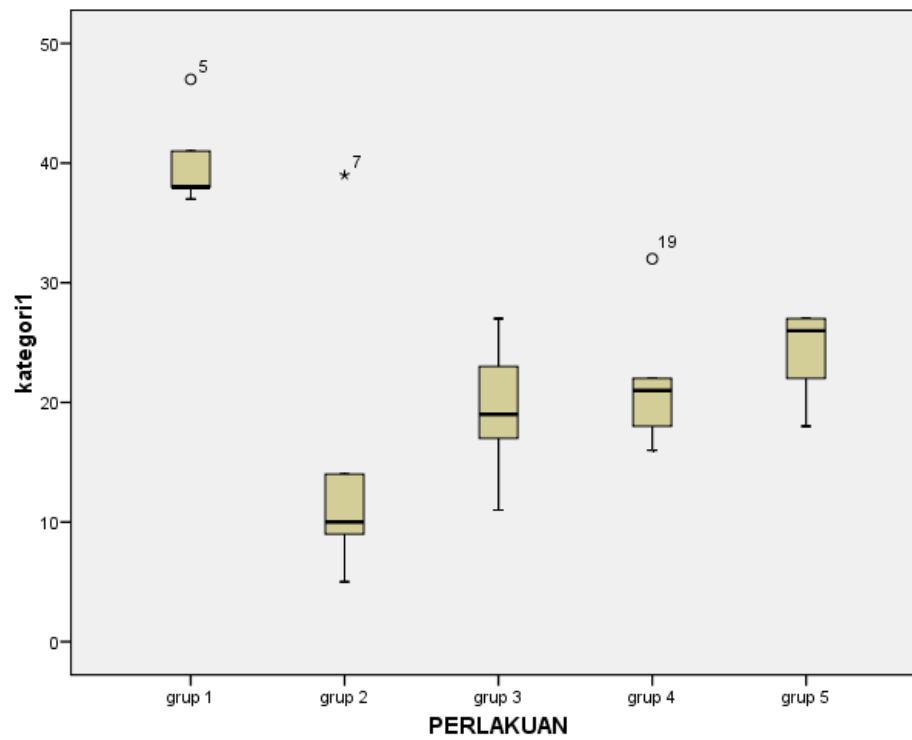
Oneway

ANOVA

zkategori1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.827	4	.957	5.897	.003
Within Groups	3.245	20	.162		
Total	7.071	24			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: zkategori1

LSD

(I) PERLAKUAN	(J) PERLAKUAN	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
grup 1	grup 2	1.22241*	.25474	.000	.6910	1.7538
	grup 3	.76859*	.25474	.007	.2372	1.3000
	grup 4	.65713*	.25474	.018	.1257	1.1885
	grup 5	.61625*	.25474	.025	.0849	1.1476
grup 2	grup 1	-1.22241*	.25474	.000	-1.7538	-.6910
	grup 3	-.45382	.25474	.090	-.9852	.0776
	grup 4	-.56528*	.25474	.038	-1.0967	-.0339
	grup 5	-.60616*	.25474	.027	-1.1375	-.0748
grup 3	grup 1	-.76859*	.25474	.007	-1.3000	-.2372
	grup 2	.45382	.25474	.090	-.0776	.9852
	grup 4	-.11146	.25474	.666	-.6428	.4199
	grup 5	-.15234	.25474	.557	-.6837	.3790
grup 4	grup 1	-.65713*	.25474	.018	-1.1885	-.1257
	grup 2	.56528*	.25474	.038	.0339	1.0967
	grup 3	.11146	.25474	.666	-.4199	.6428
	grup 5	-.04088	.25474	.874	-.5723	.4905
grup 5	grup 1	-.61625*	.25474	.025	-1.1476	-.0849
	grup 2	.60616*	.25474	.027	.0748	1.1375
	grup 3	.15234	.25474	.557	-.3790	.6837
	grup 4	.04088	.25474	.874	-.4905	.5723

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

KATEGORI 2

Case Summaries

Late maturity arrest

PERLAKUAN	N	Mean	Std. Deviation	Median	Minimum	Maximum
grup 1	5	9.00	3.937	11.00	3	12
grup 2	5	9.60	4.159	9.00	4	15
grup 3	5	25.40	4.278	24.00	21	32
grup 4	5	25.60	4.561	26.00	18	30
grup 5	5	23.00	3.536	23.00	19	27
Total	25	18.52	8.603	20.00	3	32

Tests of Normality

	PERLAKUAN	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
kategori2	grup 1	.294	5	.181	.833	5	.148
	grup 2	.157	5	.200*	.990	5	.979
	grup 3	.228	5	.200*	.936	5	.636
	grup 4	.335	5	.069	.860	5	.228
	grup 5	.202	5	.200*	.915	5	.501

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
kategori2	Based on Mean	.034	4	20	.998
	Based on Median	.007	4	20	1.000
	Based on Median and with adjusted df	.007	4	17.364	1.000
	Based on trimmed mean	.033	4	20	.998
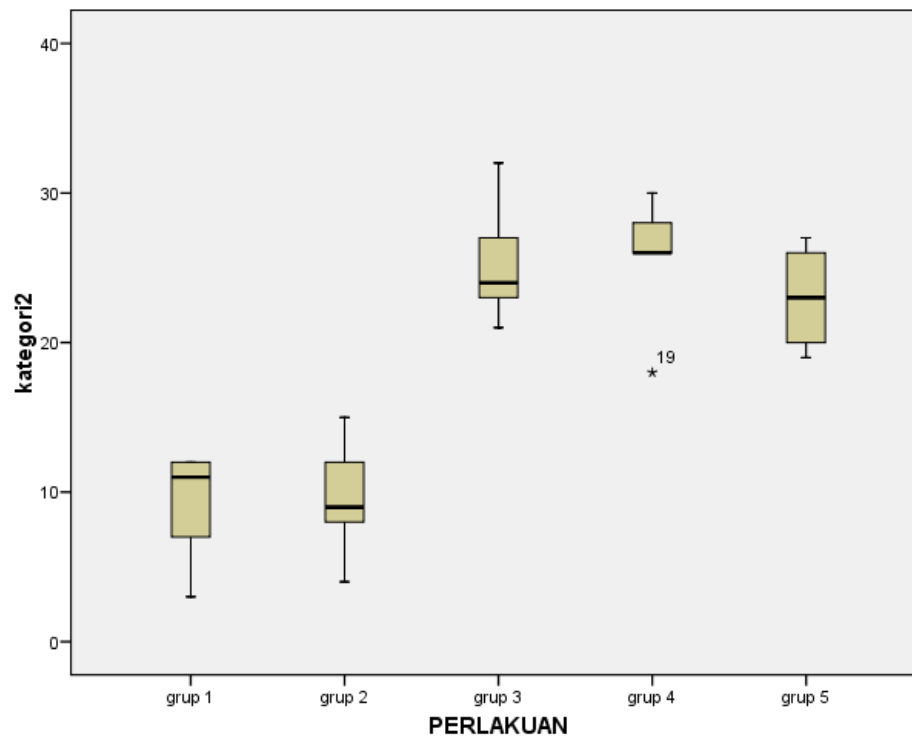
Oneway

ANOVA

kategori2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1438.640	4	359.660	21.307	.000
Within Groups	337.600	20	16.880		
Total	1776.240	24			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: kategori2

LSD

(I) PERLAKUAN	(J) PERLAKUAN	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
grup 1	grup 2	-.600	2.598	.820	-6.02	4.82
	grup 3	-16.400*	2.598	.000	-21.82	-10.98
	grup 4	-16.600*	2.598	.000	-22.02	-11.18
	grup 5	-14.000*	2.598	.000	-19.42	-8.58
grup 2	grup 1	.600	2.598	.820	-4.82	6.02
	grup 3	-15.800*	2.598	.000	-21.22	-10.38
	grup 4	-16.000*	2.598	.000	-21.42	-10.58
	grup 5	-13.400*	2.598	.000	-18.82	-7.98
grup 3	grup 1	16.400*	2.598	.000	10.98	21.82
	grup 2	15.800*	2.598	.000	10.38	21.22
	grup 4	-.200	2.598	.939	-5.62	5.22
	grup 5	2.400	2.598	.367	-3.02	7.82
grup 4	grup 1	16.600*	2.598	.000	11.18	22.02
	grup 2	16.000*	2.598	.000	10.58	21.42
	grup 3	.200	2.598	.939	-5.22	5.62
	grup 5	2.600	2.598	.329	-2.82	8.02
grup 5	grup 1	14.000*	2.598	.000	8.58	19.42
	grup 2	13.400*	2.598	.000	7.98	18.82
	grup 3	-2.400	2.598	.367	-7.82	3.02
	grup 4	-2.600	2.598	.329	-8.02	2.82

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

KATEGORI 3

Case Summaries

Early maturity arrest

PERLAKUAN	N	Mean	Std. Deviation	Median	Minimum	Maximum
grup 1	5	.80	.837	1.00	0	2
grup 2	5	24.40	12.260	28.00	3	34
grup 3	5	5.20	2.168	6.00	2	7
grup 4	5	3.00	2.828	4.00	0	6
grup 5	5	5.00	1.225	5.00	3	6
Total	25	7.68	10.148	5.00	0	34

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	PERLAKUAN	Statistic	df	Sig.	Statistic	df	Sig.
Early maturity arrest	grup 1	.231	5	.200*	.881	5	.314
	grup 2	.384	5	.015	.757	5	.034
	grup 3	.244	5	.200*	.871	5	.272
	grup 4	.256	5	.200*	.843	5	.174
	grup 5	.300	5	.161	.833	5	.146

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Early maturity arrest	Based on Mean	4.398	4	20	.010
	Based on Median	1.402	4	20	.269
	Based on Median and with adjusted df	1.402	4	4.487	.364
	Based on trimmed mean	3.451	4	20	.027

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	PERLAKUAN	Statistic	df	Sig.	Statistic	df	Sig.
zkategori3	grup 1	.385	3	.	.750	3	.000
	grup 2	.439	5	.002	.635	5	.002
	grup 3	.273	5	.200*	.827	5	.131
	grup 4	.193	3	.	.997	3	.889
	grup 5	.341	5	.058	.788	5	.065

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

a. Lilliefors Significance Correction
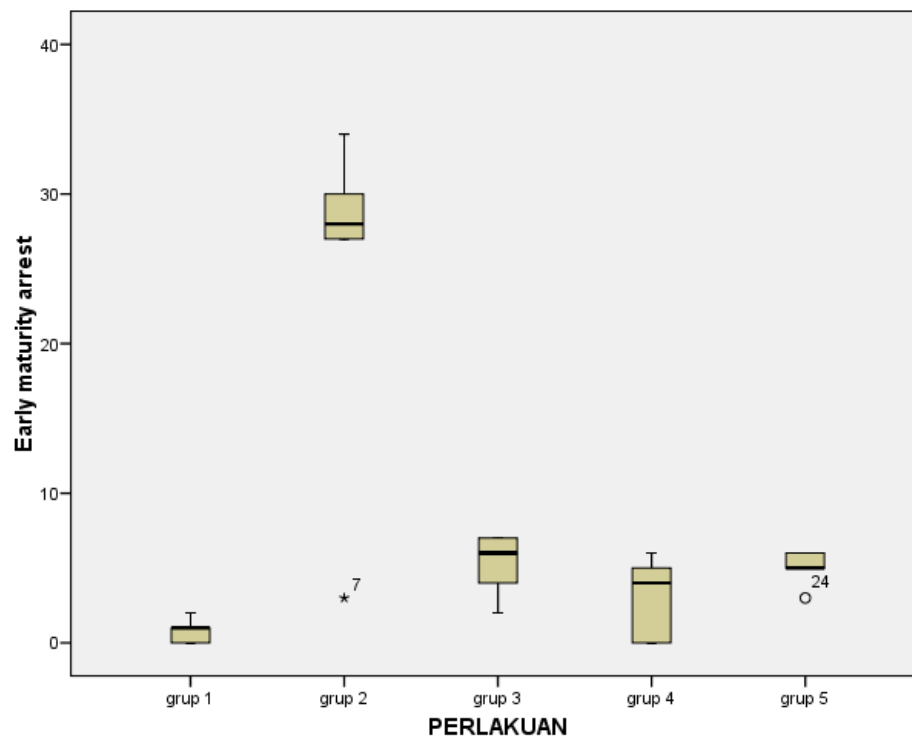
NPar Tests

Kruskal-Wallis Test

Ranks

	PERLAKUAN	N	Mean Rank
Early maturity arrest	grup 1	5	4.70
	grup 2	5	20.70
	grup 3	5	15.50
	grup 4	5	9.60
	grup 5	5	14.50
	Total	25	

Test Statistics[a,b]

	Early maturity arrest
Chi-Square	13.838
df	4
Asymp. Sig.	.008

a. Kruskal Wallis Test

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 1	5	3.00	15.00
	grup 2	5	8.00	40.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.627
Asymp. Sig. (2-tailed)	.009
Exact Sig. [2*(1-tailed Sig.)]	.008[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 1	5	3.10	15.50
	grup 3	5	7.90	39.50
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	.500
Wilcoxon W	15.500
Z	-2.538
Asymp. Sig. (2-tailed)	.011
Exact Sig. [2*(1-tailed Sig.)]	.008[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 1	5	4.60	23.00
	grup 4	5	6.40	32.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	8.000
Wilcoxon W	23.000
Z	-.973
Asymp. Sig. (2-tailed)	.331
Exact Sig. [2*(1-tailed Sig.)]	.421[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 1	5	3.00	15.00
	grup 5	5	8.00	40.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.643
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 2	5	7.20	36.00
	grup 3	5	3.80	19.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	4.000
Wilcoxon W	19.000
Z	-1.781
Asymp. Sig. (2-tailed)	.075
Exact Sig. [2*(1-tailed Sig.)]	.095[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 2	5	7.40	37.00
	grup 4	5	3.60	18.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	3.000
Wilcoxon W	18.000
Z	-1.991
Asymp. Sig. (2-tailed)	.047
Exact Sig. [2*(1-tailed Sig.)]	.056[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 2	5	7.10	35.50
	grup 5	5	3.90	19.50
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	4.500
Wilcoxon W	19.500
Z	-1.687
Asymp. Sig. (2-tailed)	.092
Exact Sig. [2*(1-tailed Sig.)]	.095[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 3	5	6.80	34.00
	grup 4	5	4.20	21.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	6.000
Wilcoxon W	21.000
Z	-1.375
Asymp. Sig. (2-tailed)	.169
Exact Sig. [2*(1-tailed Sig.)]	.222[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 3	5	6.00	30.00
	grup 5	5	5.00	25.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.532
Asymp. Sig. (2-tailed)	.595
Exact Sig. [2*(1-tailed Sig.)]	.690[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

NPar Tests

Mann-Whitney Test

Ranks

	PERLAKUAN	N	Mean Rank	Sum of Ranks
Early maturity arrest	grup 4	5	4.40	22.00
	grup 5	5	6.60	33.00
	Total	10		

Test Statistics[b]

	Early maturity arrest
Mann-Whitney U	7.000
Wilcoxon W	22.000
Z	-1.182
Asymp. Sig. (2-tailed)	.237
Exact Sig. [2*(1-tailed Sig.)]	.310[a]

a. Not corrected for ties.

b. Grouping Variable: PERLAKUAN

KATEGORI 4

Case Summaries

Absences of germ cell

PERLAKUAN	N	Mean	Std. Deviation	Median	Minimum	Maximum
grup 1	5	.00	.000	.00	0	0
grup 2	5	.80	1.304	.00	0	3
grup 3	5	.00	.000	.00	0	0
grup 4	5	.00	.000	.00	0	0
grup 5	5	.00	.000	.00	0	0
Total	25	.16	.624	.00	0	3

Tests of Normality[b,c,d,e]

	PERLAKUAN	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Absences of germ cell	grup 2	.330	5	.079	.735	5	.021

a. Lilliefors Significance Correction

b. Absences of germ cell is constant when PERLAKUAN = grup 1. It has been omitted.

c. Absences of germ cell is constant when PERLAKUAN = grup 3. It has been omitted.

d. Absences of germ cell is constant when PERLAKUAN = grup 4. It has been omitted.

e. Absences of germ cell is constant when PERLAKUAN = grup 5. It has been omitted.

Test of Homogeneity of Variance[b,c,d,e]

		Levene Statistic
Absences of germ cell	Based on Mean	.[a]

a. There are not enough unique spread/level pairs to compute the Levene statistic.

b. Absences of germ cell is constant when PERLAKUAN = grup 1. It has been omitted.

c. Absences of germ cell is constant when PERLAKUAN = grup 3. It has been omitted.

d. Absences of germ cell is constant when PERLAKUAN = grup 4. It has been omitted.

e. Absences of germ cell is constant when PERLAKUAN = grup 5. It has been omitted.

Tests of Normality[b,c,d]

	PERLAKUAN	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
zkategori4	grup 1	.473	5	.001	.552	5	.000
	grup 2	.360	5	.033	.658	5	.003

a. Lilliefors Significance Correction

b. zkategori4 is constant when PERLAKUAN = grup 3. It has been omitted.

c. zkategori4 is constant when PERLAKUAN = grup 4. It has been omitted.

d. zkategori4 is constant when PERLAKUAN = grup 5. It has been omitted.
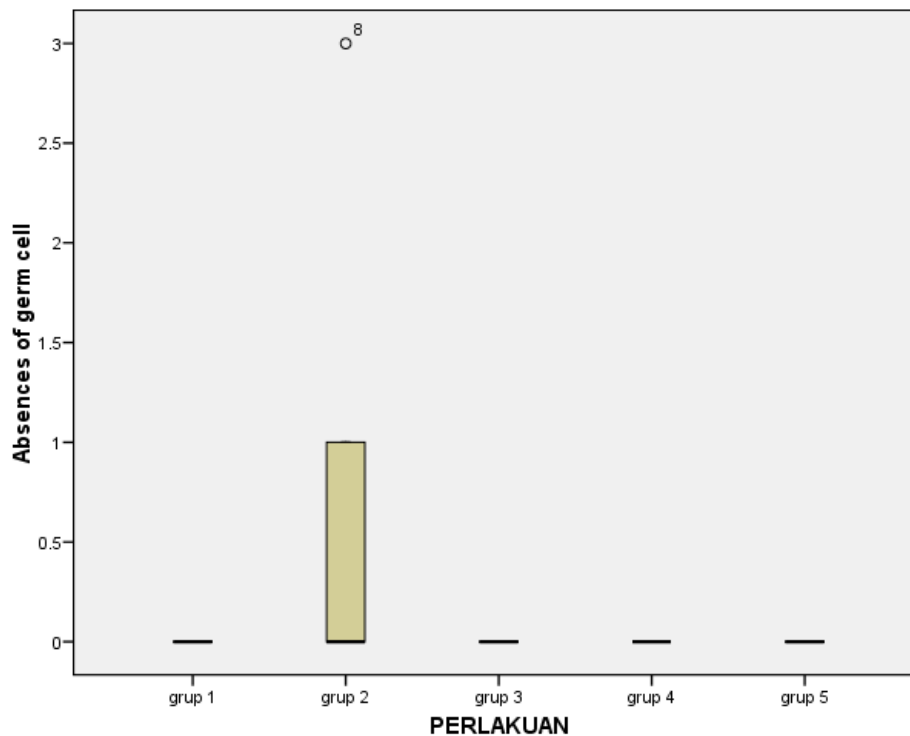
NPar Tests

Kruskal-Wallis Test

Ranks

	PERLAKUAN	N	Mean Rank
Absences of germ cell	grup 1	5	12.00
	grup 2	5	17.00
	grup 3	5	12.00
	grup 4	5	12.00
	grup 5	5	12.00
	Total	25	

Test Statistics[a,b]

	Absences of germ cell
Chi-Square	8.333
df	4
Asymp. Sig.	.080

a. Kruskal Wallis Test

b. Grouping Variable: PERLAKUAN

LAMPIRAN 5

Curriculum Vitae

Curriculum Vitae

Personal Information

Name	Mohammad Ali Akbar
Address	Jl. Jendral Sudirman No 43 Rt. II
	Kelurahan Jogoboyo, Lubuklinggau Sumsel
Telephone	085273259554
E-mail address	mrfirebolt17@yahoo.com
Nationality	Indonesia
Date of birth	Lubuklinggau, 30th December 1992
Gender	Male
Status	Single
Year of recent medical student	5th grade of medical students
GPA	3,50
TOEFL Score	500

Work Experience and Organization

Dates	2010
Occupation or position held	Head of Organizing committee
Name and Address of employer	Music performances on campus 2010, Medical Faculty Diponegoro University
Dates	2010-2011
Occupation or position held	Staff of sport and Art Department
Name and Address of employer	Student Executive board of Medical Faculty of Diponegoro University
	2012-2013
Dates	Teaching Assistant
Occupation or position held	Anatomy Department of Medical Faculty of Diponegoro University
Name and Address of employer	

	2012-2013
Dates	Head of Djarum Beasiswa Plus DSO Semarang
Occupation or position held	Djarum Foundation Education Scholarship
Name and Address of employer	
	2012
Dates	Coordinator of Organizing committee
Occupation or position held	Art and Sport Fair (PORSENI) 2012, Medical Faculty of Diponegoro
Name and Address of employer	University
	2013-2014
Dates	Staff of Disaster Department
Occupation or position held	Indonesian Medical Students Emergency Team Asociation
Name and Address of employer	
	2013-2014
Dates	Teaching Assistant
Occupation or position held	Anatomy Department of Medical Faculty of Diponegoro University
Name and Address of employer	
	2013-2014
Dates	Head of Training and Education
Occupation or position held	Medical Students Nature Lovers (MALADICA) Diponegoro University
Name and Address of employer	
	2014
	The Speaker of Basic Life Support Training
Dates	Medical Students Nature Lovers (MALADICA) Diponegoro University
Occupation or position held	
Name and Address of employer	2014
	The Speaker of Scholarship Promotions
	Prosperity Departments of Medical Faculty Student Executive board of
Dates	Diponegoro University
Occupation or position held	
Name and Address of employer	2014
	The Speaker of Minor Surgery
	Training and Education Departements of Medical Faculty Student

Dates	Executive board of Diponegoro University
Occupation or position held	
Name and Address of employer	2014
	The Speaker of Future Leader Educator 2014 "How To Makes Your presentation Different"
Dates	Human Resources Departement of Engineering Students Executive Board
Occupation or position held	of Diponegoro University
Name and Address of employer	
	2010 - 2014
Education	-
	Medical Faculty of Diponegoro University
Dates	3.5
Title of qualification awarded	
Name and type of organization	2008-2010
GPA	SMA plus Negeri 17 Palembang, South Sumatera Indonesia (Senior High School)
Dates	9.2
Name and type of organization	
	2005-2008
GPA	SMP Negeri 1 Lubuklinggau, South Sumatera Indonesia (Junior High School)
Dates	8.4
Name and type of organization	
	1999-2005
GPA	SD Negeri 16 Lubuklinggau, South Sumatera (Elementary School)
	7.5
Dates	
Name and type of organization	
GPA	2010/Basic Organization Training, Student Executive board of Medical Faculty of Diponegoro University

Course and Training	2011/ Premarriage Counseling: The Needs for Premarrital medical students
Dates /Name of course	in medical and Islamic Point of View, Scientific of Islamic Medical
	Seminar Student Executive board of Medical Faculty of Diponegoro
Dates /Name of course	University
	2012/National Building Training, Djarum Foundation Education
	Scholarship
	2012/ Character Building, Djarum Foundation Education Scholarship
Dates /Name of course	2012/ Leadership Development, Djarum Foundation Education Scholarship
	2013/ Medical Training Partus, Student Executive board of Medical
Dates /Name of course	Faculty of Diponegoro University
Dates /Name of course	2013/ Various View in Extremity Fracture, Gajah Mada Medical Science
	Olympiad committee of Gajah Mada University
Dates /Name of course	2013/ Grab Your Audience Training (Public Speaking Training) James
	Gwee training by Djarum Foundation
Dates /Name of course	
Dates /Name of course	
	Indonesia
	English
Personal skills and competences	Microsoft office (word, Excell, Power Point)
Mother language	
Other languages	
Computer skills and competences	1. Neurosurgery
	2. Neuroradiology
Personal interest	
	1. The Effects Of Square antimosquito and liquid antimosquito to Spermatogenesis According to Histopatological Image
Project /Research Experiences	2. Utilization of Human Blood Jelly as alternative media to change Haemophylus test media (HTM) for Antibiotic sensitivity test
	3. Griffithsin, Antiretroviral from Transgenic Tobacco as The Alternative Medicine for PWHA (People With HIV AIDS) in Indonesia to Increase Their Quality of Life

Achievements	1. The Best Team Performance of Djarum Foundation Outbond competition 2012 2. Gold Medal for musculoskeletal science, Indonesian Medical Olympiade 2013 3. The Winning Team of Djarum Foundation Debate Competition 2013 4. Bronze Medal For anatomy science Gajahmada Indonesian Science Medical Olympiade 2013 3. First Winner Djarum Foundation writing competition Mid java 2013 4. third winner Djarum Foundation writing competition Indonesia 2013 5. Participants of Grab Your Audience training for Public speaking By James Gwee. Jakarta 2013 6. Achievements Student of Medical Students in Diponegoro University. 2013, 2014 7. first winner basketball medical Championship 2012, 2013, 2014

Lap 1

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Lap 2

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Lap 3

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Lap 4

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Lap 5

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Keterangan

Penilaian score spermatogenesis
Spermatogenesis = lengkap dan teratur
Spermatozoa = > 10 / <10
Epitel tubulus = normal / tidak normal ;
teratur/tidak teratur; Teratur atau tidak
Lumen tubulus = terbuka/tertutup
Spermatid = >10 / <10
Spermatosit = >5/<5
Spermatogonia= +/-
Sel sertoli = +/-

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	

Kriteria	Kesan
Spermatogesis	
Spermatozoa	
Epitel tubulus	
Lumen tubulus	
Spermatid	
Spermatosit	
Spermatogonia	
Sel sertoli	
Score	