LAMPIRAN

Lampiran 1

PERBANDINGAN EFEKTIFITAS PENCEGAHAN NYERI SAAT INJEKSI ROCURONIUM PADA INDUKSI ANESTESI DIGBPT RSUD dr.SOETOMO ANTARA LIDOKAIN 2%, FENTANYL DAN PENGENCERAN ROCURONIUM DISERTAI KECEPATAN PENYUNTIKAN

Untuk memperlancar jalannya pembedahan yang akan Bapak/Ibu/Saudara/Saudari jalani, maka diperlukan suatu tindakan pembiusan terlebih dahulu. Dengan adanya tindakan pembiusan terlebih dahulu, diharapkan Bapak/Ibu/Saudara/Saudari akan tertidur (tidak sadar hanya untuk sementara) dan tidak merasakan nyeri selama pembedahan. Untuk itu akan diberikan obat-obat pembiusan yang antara lain obat yang akan membuat tidak sadar, obat yang membuat tidak nyeri dan obat yang melemaskan otot-otot tubuh.

Saat ini terdapat obat yang dapat melemaskan otot-otot tubuh mempunyai keunggulan karena mempunyai mula kerja yang singkat sehingga lebih cepat dilalui proses awal pembiusan.

Dalam perkembangannya, dilaporkan bahwa adakalanya timbul nyeri pada lengan sewaktu penyuntikan obat ini, walaupun hal ini tidak membahayakan. Pada penelitian ini akan diberikan obatuntuk menangkal nyeri tersebut yaitu lidokain, fentanyl dan dilakukan pengenceran, akan dinilai apakah dosis yang diberikan cukup baik.

Bila Bapak/Ibu/Saudara/Saudari setuju diikutsertakan dalam penelitian ini maka kami sangat mengharapkan kerjasama yang baik dan menanda tanganin surat persetujuan uji klinik.

Bila Bapak/Ibu/Saudara/Saudari tidak bersedia atau setelah dalam penelitian berniat berhenti, akan tetap dilakukan pelayanan sebagai mana mestinya.

Terima kasih

Dr. Lidia

PERBANDINGAN EFEKTIFITAS PENCEGAHAN NYERI SAAT INJEKSI ROCURONIUM PADA INDUKSI ANESTESI DIGBPT RSUD dr.SOETOMO ANTARA LIDOKAIN 2%, FENTANYL DAN PENGENCERAN ROCURONIUM DISERTAI KECEPATAN PENYUNTIKAN

Saya yang bertanda tangan dibawah ini :

Nama :

Umur : thn

Alamat :

No. Identitas :

Sebagai .....

Dari :

Nama :

Umur : thn

memberikan persetujuan untuk diikut sertakan dalam penelitian dan sudah mengetahui dengan jelas prosedur yang akan dilakukan. Terima Kasih.

Dokter Pasien/Keluarga

(.....) (.....)

Lampiran 2

FORMULIR PENELITIAN

PERBANDINGAN EFEKTIFITAS PENCEGAHAN NYERI SAAT INJEKSI ROCURONIUM PADA INDUKSI ANESTESI DIGBPT RSUD dr.SOETOMO ANTARA LIDOKAIN 2%, FENTANYL DAN PENGENCERAN ROCURONIUM DISERTAI KECEPATAN PENYUNTIKAN

I. REGISTRASI :

Tanggal penelitian :.....

Nomor penelitian :.....

Nomor rekam medis :.....

II. IDENTITAS PENDERITA :

Nama :.....

Umur :.....

Jenis kelamin :.....

Pendidikan :.....

Diagnosa :.....

Operasi :.....

III. PEMERIKSAAN FISIK :

Berat Badan :.....

Tinggi Badan :.....

BMI :.....

Riwayat : alergi Ya / Tdk, bila Ya.....

Asma Ya / Tdk, bila Ya obat .....

Preoperasi :

Laju nafas :.....

Laju jantung :.....

Tekanan darah :.....

Status fisik :I / II

IV. DATA PENELITIAN

1. Obat yang dipakai :
2. Dosis Rocuronium :(0,6 mg/kgbb iv) ..... mg

Monitor	1 menit sebelum pemberian obat	1 menit setelah pemberian obat
Tekanan darah (mmHg)		
MAP (2D+S)/3 (mmHg)		
Laju Jantung (x/mnt)		
Irama Jantung (Sinus/Aritmia)		

3. Skala 4 titik
    1. Tidak ada respon
    2. Gerakan hanya dipergelangan tangan
    3. Gerakan yang melibatkan lengan saja (siku atau bahu)
    4. Gerakan generalisata atau withdrawal pada lebih dari satu ekstremitas, batuk atau menahan nafas

    Hasil .....

Catatan :

Pembimbing,

Dr. Arie Utariani,dr.SpAn KAP

Dr. E. Hanindito,dr.SpAn KAP

Peneliti,

Lidia,dr

PPDS : .....

Cara Kerja :

1. Sebelum masuk ke kamar bedah, kepada pasien dijelaskan mengenai penelitian dan setelah mengerti diminta menanda tanganin *informed consent* penelitian
2. Identitas Pasien dicatat: Usia, Jenis kelamin dan tingkat pendidikan
3. Pasien dibaringkan dimeja operasi, dipasang alat pemantau irama jantung dan tekanan darah
4. Memastikan jalur intravena dengan kanula vena G20-G18 dengan three way pada vena *dorsum manus* menetes dengan lancer dengan cairan rumatan 1cc/kgBB/jam
5. Pasien dimasukkan secara acak ke kelompok I: 50 mg lidokain 2% (2,5 ml), kelompok II : 1µg/kgBB fentanyl, kelompok III: 5 ml Nacl 0,9% yang dicampurkan dengan Rocuronium bromide 5ml menjadi 10 ml (Rocuronium 5mg/cc), Kelompok IV: Rocuronium bromide 5ml (Rocuronium 10mg/cc)
6. Semua semprit telah disiapkan oleh asisten
7. Asisten membuka amplop yang tertutup dan memberikan obat yang sesuai dengan hasil pengacakan, 50 mg lidokain 2% (2,5 ml), 1µg/kgBB fentanyl, 5 ml Nacl 0,9% yang dicampurkan dengan Rocuronium bromide 5ml menjadi 10 ml (Rocuronium 5mg/cc), Rocuronium bromide 5ml (Rocuronium 10mg/cc)
8. Tekanan darah, laju jantung dan irama jantung dicatat sebelum dan sesudah pemberian 50 mg lidokain 2% (2,5 ml), 1µg/kgBB fentanyl, 5 ml Nacl 0,9% yang dicampurkan dengan Rocuronium bromide 5 ml menjadi 10 ml (Rocuronium 5mg/cc), Rocuronium bromide 5 ml (Rocuronium 10 mg/cc)
9. Pasien diberikan premedikasi midazolam 2,5 mg iv dikamar operasi 2 menit sebelum pemberian obat yang lainnya.
10. Penelitian dimulai, stop watch dijalankan
11. Detik ke-0 dilakukan pemberian 50 mg lidokain 2% (2,5 ml) (kelompok perlakuan I), 1 µg/kgBB fentanyl (kelompok perlakuan II)

setelah itu detik ke 120 diberikan rocuronium dengan dosis intubasi 0,6mg/kgBB pada suhu kamar sediaan 10mg/cc dalam waktu 15 detik

12. Detik ke-120 Kelompok perlakuan III diberikan rocuronium 0,6 mg/kgBB dengan sediaan rocuronium 5mg/cc kecepatan penyuntikan 5 detik
13. Detik ke-120 kelompok kontrol diberikan rocuronium 0,6 mg/kgBB dengan sediaan rocuronium 10 mg/cc kecepatan penyuntikan 15 detik
12. Sementara rocuronium disuntikkan, dilihat respon dari penderita

    Skala empat titik :

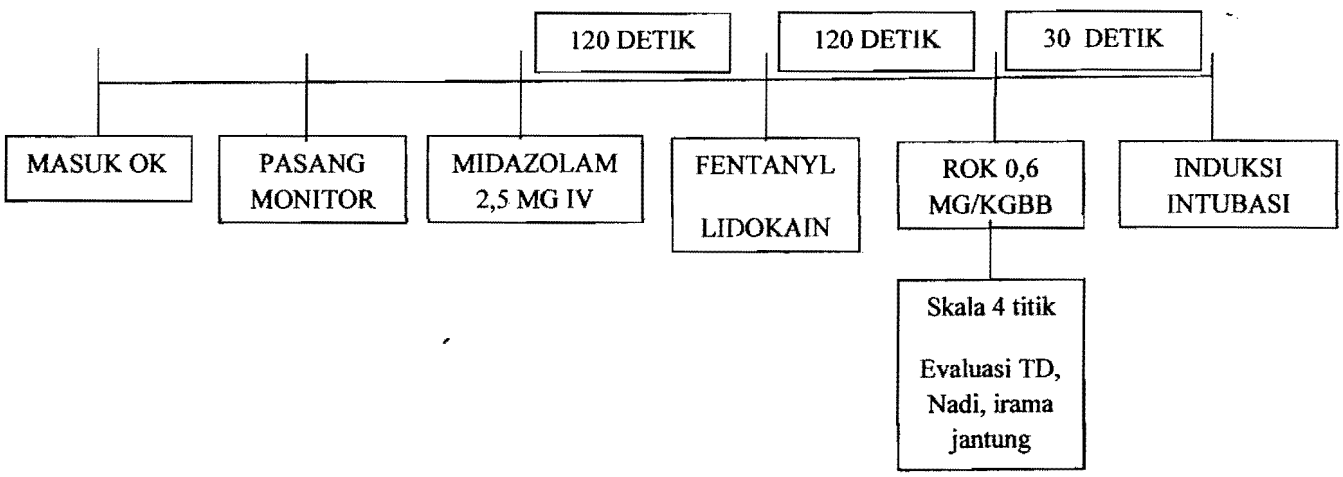
    1.Tidak ada respon

    2.Gerakan hanya dipergelangan tangan

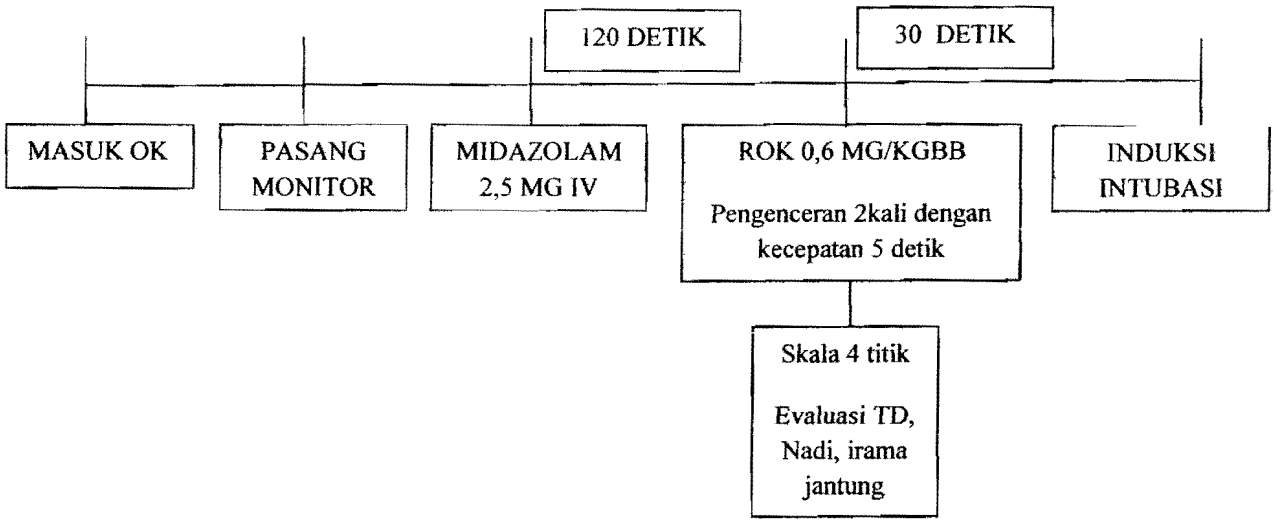
    3.Gerakan yang melibatkan lengan saja (siku atau bahu)

    4.Gerakan generalisata atau withdrawal pada lebih dari satu ekstremitas, batuk atau menahan nafas
13. Tiga puluh detik setelah penyuntikan rocuronium, dilanjutkan dengan induksi dan intubasi dilakukan 60 detik setelah pemberian rocuronium. Setelah itu anestesi dilanjutkan sesuai dengan rencana.

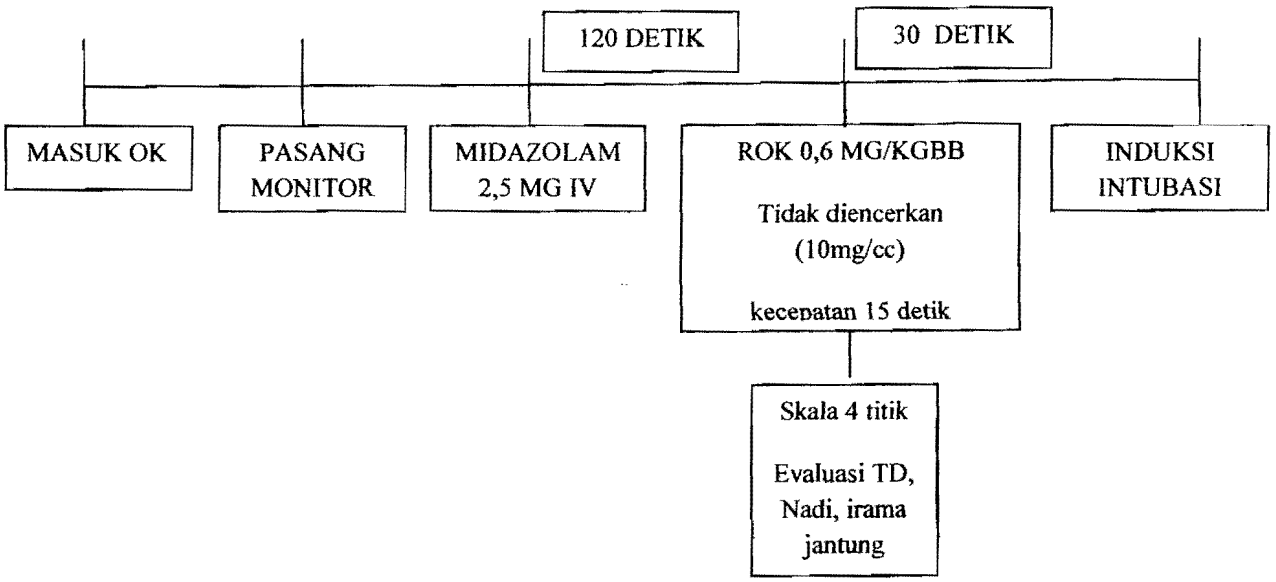
Skema Kerja Kelompok perlakuan I dan II



Skema kerja Kelompok perlakuan III



Skema kerja Kelompok IV (KONTROL)



Lampiran 3
Hasil Analisis Statistik

Kelompok 1
NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Umur	BB
N		16	16
Normal Parameters[a,b]	Mean	33,6250	57,8750
	Std. Deviation	11,98819	10,71370
Most Extreme Differences	Absolute	,133	,100
	Positive	,122	,100
	Negative	-,133	-,082
Kolmogorov-Smirnov Z		,530	,400
Asymp. Sig. (2-tailed)		,941	,997

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S1	D1	MAP1	NADI1
N		16	16	16	16
Normal Parameters[a,b]	Mean	120,3125	75,5625	88,8125	92,0000
	Std. Deviation	9,30748	7,02347	7,40467	16,24808
Most Extreme Differences	Absolute	,138	,139	,196	,100
	Positive	,138	,139	,196	,082
	Negative	-,131	-,113	-,165	-,100
Kolmogorov-Smirnov Z		,554	,555	,785	,400
Asymp. Sig. (2-tailed)		,919	,918	,568	,997

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S2	D2	MAP2	NADI2
N		16	16	16	16
Normal Parameters[a,b]	Mean	117,3750	72,0625	86,0000	85,1875
	Std. Deviation	11,91008	8,78232	9,19420	10,99223
Most Extreme Differences	Absolute	,108	,151	,188	,170
	Positive	,108	,099	,188	,149
	Negative	-,087	-,151	-,082	-,170
Kolmogorov-Smirnov Z		,434	,602	,750	,679
Asymp. Sig. (2-tailed)		,992	,862	,627	,746

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		SKALA
N		16
Normal Parameters[a,b]	Mean	1,1875
	Std. Deviation	,40311
Most Extreme Differences	Absolute	,492
	Positive	,492
	Negative	-,321
Kolmogorov-Smirnov Z		1,966
Asymp. Sig. (2-tailed)		,001

a. Test distribution is Normal.

b. Calculated from data.

Kelompok 2

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Umur	BB
N		16	16
Normal Parameters[a,b]	Mean	40,6875	57,1250
	Std. Deviation	12,42427	14,44472
Most Extreme Differences	Absolute	,133	,234
	Positive	,133	,234
	Negative	-,097	-,118
Kolmogorov-Smirnov Z		,531	,934
Asymp. Sig. (2-tailed)		,940	,347

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S1	D1	MAP1	NADI1
N		16	16	16	16
Normal Parameters[a,b]	Mean	123,4375	73,5000	90,0000	95,9375
	Std. Deviation	12,80088	8,02496	8,31064	11,76701
Most Extreme Differences	Absolute	,127	,122	,092	,125
	Positive	,127	,122	,077	,125
	Negative	-,084	-,113	-,092	-,092
Kolmogorov-Smirnov Z		,507	,489	,370	,500
Asymp. Sig. (2-tailed)		,959	,970	,999	,964

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S2	D2	MAP2	NADI2
N		16	16	16	16
Normal Parameters[a,b]	Mean	117,1875	70,9375	85,4375	87,6875
	Std. Deviation	10,09435	9,55314	7,34819	12,41890
Most Extreme Differences	Absolute	,156	,141	,157	,242
	Positive	,105	,109	,157	,242
	Negative	-,156	-,141	-,150	-,100
Kolmogorov-Smirnov Z		,622	,564	,627	,966
Asymp. Sig. (2-tailed)		,834	,908	,827	,308

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		SKALA
N		16
Normal Parameters[a,b]	Mean	1,2500
	Std. Deviation	,44721
Most Extreme Differences	Absolute	,462
	Positive	,462
	Negative	-,288
Kolmogorov-Smirnov Z		1,848
Asymp. Sig. (2-tailed)		,002

a. Test distribution is Normal.

b. Calculated from data.

Kelompok 3

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Umur	BB
N		16	16
Normal Parameters[a,b]	Mean	36,0625	57,6875
	Std. Deviation	12,80348	7,75215
Most Extreme Differences	Absolute	,153	,141
	Positive	,139	,089
	Negative	-,153	-,141
Kolmogorov-Smirnov Z		,613	,564
Asymp. Sig. (2-tailed)		,847	,908

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S1	D1	MAP1	NADI1
N		16	16	16	16
Normal Parameters[a,b]	Mean	122,5625	70,1875	86,4375	93,7500
	Std. Deviation	10,74535	9,04963	7,57160	14,85261
Most Extreme Differences	Absolute	,211	,117	,155	,133
	Positive	,181	,099	,131	,109
	Negative	-,211	-,117	-,155	-,133
Kolmogorov-Smirnov Z		,842	,467	,618	,531
Asymp. Sig. (2-tailed)		,477	,981	,839	,940

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S2	D2	MAP2	NADI2
N		16	16	16	16
Normal Parameters[a,b]	Mean	128,5625	71,1875	88,5625	100,0000
	Std. Deviation	13,10455	10,59697	9,62614	17,68615
Most Extreme Differences	Absolute	,143	,132	,197	,124
	Positive	,135	,104	,197	,124
	Negative	-,143	-,132	-,184	-,080
Kolmogorov-Smirnov Z		,571	,527	,790	,495
Asymp. Sig. (2-tailed)		,900	,944	,561	,967

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		SKALA
N		16
Normal Parameters[a,b]	Mean	2,7500
	Std. Deviation	,57735
Most Extreme Differences	Absolute	,355
	Positive	,270
	Negative	-,355
Kolmogorov-Smirnov Z		1,420
Asymp. Sig. (2-tailed)		,035

a. Test distribution is Normal.

b. Calculated from data.

Kelompok 4

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		Umur	BB
N		16	16
Normal Parameters[a,b]	Mean	41,5000	57,3750
	Std. Deviation	9,94652	8,36560
Most Extreme Differences	Absolute	,150	,147
	Positive	,145	,123
	Negative	-,150	-,147
Kolmogorov-Smirnov Z		,598	,589
Asymp. Sig. (2-tailed)		,866	,878

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S1	D1	MAP1	NADI1
N		16	16	16	16
Normal Parameters[a,b]	Mean	119,8125	69,1875	85,7500	81,0000
	Std. Deviation	7,41367	8,69650	7,22496	12,70171
Most Extreme Differences	Absolute	,159	,225	,146	,219
	Positive	,159	,186	,111	,219
	Negative	-,092	-,225	-,146	-,153
Kolmogorov-Smirnov Z		,636	,899	,585	,874
Asymp. Sig. (2-tailed)		,813	,394	,884	,429

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		S2	D2	MAP2	NADI2
N		16	16	16	16
Normal Parameters[a,b]	Mean	134,0625	76,9375	97,4375	93,8125
	Std. Deviation	6,70789	7,17838	11,02705	12,63444
Most Extreme Differences	Absolute	,136	,147	,215	,182
	Positive	,136	,147	,215	,182
	Negative	-,098	-,128	-,134	-,112
Kolmogorov-Smirnov Z		,545	,589	,858	,726
Asymp. Sig. (2-tailed)		,927	,878	,453	,667

a. Test distribution is Normal.

b. Calculated from data.

NPar Tests

One-Sample Kolmogorov-Smirnov Test

		SKALA
N		16
Normal Parameters[a,b]	Mean	3,9375
	Std. Deviation	,25000
Most Extreme Differences	Absolute	,536
	Positive	,401
	Negative	-,536
Kolmogorov-Smirnov Z		2,145
Asymp. Sig. (2-tailed)		,000

a. Test distribution is Normal.

b. Calculated from data.

Crosstabs

Seks * KELOMPOK Crosstabulation

			KELOMPOK				Total
			1,00	2,00	3,00	4,00	
Seks	L	Count	10	3	5	7	25
		% within KELOMPOK	62,5%	18,8%	31,3%	43,8%	39,1%
	P	Count	6	13	11	9	39
		% within KELOMPOK	37,5%	81,3%	68,8%	56,3%	60,9%
Total		Count	16	16	16	16	64
		% within KELOMPOK	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,024[a]	3	,071
Likelihood Ratio	7,218	3	,065
Linear-by-Linear Association	,633	1	,426
N of Valid Cases	64		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 6,25.

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Umur	1,00	16	33,6250	11,98819	2,99705	27,2369	40,0131	18,00	52,00
	2,00	16	40,6875	12,42427	3,10607	34,0671	47,3079	22,00	67,00
	3,00	16	36,0625	12,80348	3,20087	29,2400	42,8850	18,00	54,00
	4,00	16	41,5000	9,94652	2,48663	36,1999	46,8001	26,00	56,00
	Total	64	37,9688	12,01318	1,50165	34,9679	40,9696	18,00	67,00
BB	1,00	16	57,8750	10,71370	2,67842	52,1661	63,5839	40,00	76,00
	2,00	16	57,1250	14,44472	3,61118	49,4280	64,8220	40,00	87,00
	3,00	16	57,6875	7,75215	1,93804	53,5567	61,8183	44,00	70,00
	4,00	16	57,3750	8,36560	2,09140	52,9173	61,8327	45,00	70,00
	Total	64	57,5156	10,39535	1,29942	54,9189	60,1123	40,00	87,00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Umur	Between Groups	677,813	3	225,938	1,611	,196
	Within Groups	8414,125	60	140,235		
	Total	9091,938	63			
BB	Between Groups	5,297	3	1,766	,016	,997
	Within Groups	6802,688	60	113,378		
	Total	6807,984	63			

Pendidikan * KELOMPOK Crosstabulation

			KELOMPOK				Total
			1,00	2,00	3,00	4,00	
Pendidikan	SD	Count	2	1	1	0	4
		% within KELOMPOK	12,5%	6,3%	6,3%	,0%	6,3%
	SMP	Count	1	2	2	4	9
		% within KELOMPOK	6,3%	12,5%	12,5%	25,0%	14,1%
	SMA	Count	10	10	10	9	39
		% within KELOMPOK	62,5%	62,5%	62,5%	56,3%	60,9%
	PT	Count	3	3	3	3	12
		% within KELOMPOK	18,8%	18,8%	18,8%	18,8%	18,8%
Total		Count	16	16	16	16	64
		% within KELOMPOK	100,0%	100,0%	100,0%	100,0%	100,0%

NPar Tests

Kruskal-Wallis Test

Ranks

	KELOMPOK	N	Mean Rank
Pendidikan	1,00	16	32,47
	2,00	16	32,88
	3,00	16	32,88
	4,00	16	31,78
	Total	64	

Test Statistics[a,b]

	Pendidikan
Chi-Square	,048
df	3
Asymp. Sig.	,997

a. Kruskal Wallis Test

b. Grouping Variable: KELOMPOK

PS_ASA * KELOMPOK Crosstabulation

			KELOMPOK				
			1,00	2,00	3,00	4,00	Total
PS_ ASA	1,00	Count	7	7	7	10	31
		% within KELOMPOK	43,8%	43,8%	43,8%	62,5%	48,4%
	2,00	Count	9	9	9	6	33
		% within KELOMPOK	56,3%	56,3%	56,3%	37,5%	51,6%
Total		Count	16	16	16	16	64
		% within KELOMPOK	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,689[a]	3	,639
Likelihood Ratio	1,700	3	,637
Linear-by-Linear Association	,998	1	,318
N of Valid Cases	64		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 7,75.

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
S1	1,00	16	120,3125	9,30748	2,32687	115,3529	125,2721	100,00	140,00
	2,00	16	123,4375	12,80088	3,20022	116,6164	130,2586	102,00	145,00
	3,00	16	122,5625	10,74535	2,68634	116,8367	128,2883	95,00	140,00
	4,00	16	119,8125	7,41367	1,85342	115,8620	123,7630	108,00	135,00
	Total	64	121,5313	10,12614	1,26577	119,0018	124,0607	95,00	145,00
D1	1,00	16	75,5625	7,02347	1,75587	71,8200	79,3050	60,00	90,00
	2,00	16	73,5000	8,02496	2,00624	69,2238	77,7762	56,00	88,00
	3,00	16	70,1875	9,04963	2,26241	65,3653	75,0097	52,00	85,00
	4,00	16	69,1875	8,69650	2,17413	64,5535	73,8215	52,00	91,00
	Total	64	72,1094	8,43861	1,05483	70,0015	74,2173	52,00	91,00
MAP1	1,00	16	88,8125	7,40467	1,85117	84,8668	92,7582	73,00	106,00
	2,00	16	90,0000	8,31064	2,07766	85,5716	94,4284	74,00	104,00
	3,00	16	86,4375	7,57160	1,89290	82,4029	90,4721	71,00	100,00
	4,00	16	85,7500	7,22496	1,80624	81,9001	89,5999	71,00	102,00
	Total	64	87,7500	7,65527	,95691	85,8378	89,6622	71,00	106,00
NADI1	1,00	16	92,0000	16,24808	4,06202	83,3420	100,6580	60,00	121,00
	2,00	16	95,9375	11,76701	2,94175	89,6673	102,2077	76,00	116,00
	3,00	16	93,7500	14,85261	3,71315	85,8356	101,6644	60,00	120,00
	4,00	16	81,0000	12,70171	3,17543	74,2317	87,7683	68,00	120,00
	Total	64	90,6719	14,84636	1,85580	86,9634	94,3804	60,00	121,00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	146,188	3	48,729	,463	,709
	Within Groups	6313,750	60	105,229		
	Total	6459,938	63			
D1	Between Groups	417,422	3	139,141	2,052	,116
	Within Groups	4068,813	60	67,814		
	Total	4486,234	63			
MAP1	Between Groups	190,625	3	63,542	1,089	,361
	Within Groups	3501,375	60	58,356		
	Total	3692,000	63			
NADI1	Between Groups	2120,172	3	706,724	3,604	,018
	Within Groups	11765,938	60	196,099		
	Total	13886,109	63			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: NADI1

LSD

(I) KELOMPOK	(J) KELOMPOK	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1,00	2,00	-3,93750	4,95100	,430	-13,8410	5,9660
	3,00	-1,75000	4,95100	,725	-11,6535	8,1535
	4,00	11,00000*	4,95100	,030	1,0965	20,9035
2,00	1,00	3,93750	4,95100	,430	-5,9660	13,8410
	3,00	2,18750	4,95100	,660	-7,7160	12,0910
	4,00	14,93750*	4,95100	,004	5,0340	24,8410
3,00	1,00	1,75000	4,95100	,725	-8,1535	11,6535
	2,00	-2,18750	4,95100	,660	-12,0910	7,7160
	4,00	12,75000*	4,95100	,012	2,8465	22,6535
4,00	1,00	-11,00000*	4,95100	,030	-20,9035	-1,0965
	2,00	-14,93750*	4,95100	,004	-24,8410	-5,0340
	3,00	-12,75000*	4,95100	,012	-22,6535	-2,8465

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

Case Summaries

SKALA

KELOMPOK	N	Mean	Std. Deviation	Median	Minimum	Maximum
1,00	16	1,1875	,40311	1,0000	1,00	2,00
2,00	16	1,2500	,44721	1,0000	1,00	2,00
3,00	16	2,7500	,57735	3,0000	2,00	4,00
4,00	16	3,9375	,25000	4,0000	3,00	4,00
Total	64	2,2813	1,22758	2,0000	1,00	4,00

NPar Tests

Kruskal-Wallis Test

Ranks

	KELOMPOK	N	Mean Rank
SKALA	1,00	16	16,47
	2,00	16	17,63
	3,00	16	40,25
	4,00	16	55,66
	Total	64	

Test Statistics[a,b]

	SKALA
Chi-Square	54,301
df	3
Asymp. Sig.	,000

a. Kruskal Wallis Test

b. Grouping Variable: KELOMPOK

NPar Tests

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
SKALA	1,00	16	16,00	256,00
	2,00	16	17,00	272,00
	Total	32		

Test Statistics[b]

	SKALA
Mann-Whitney U	120,000
Wilcoxon W	256,000
Z	-,421
Asymp. Sig. (2-tailed)	,674
Exact Sig. [2*(1-tailed Sig.)]	,780[a]

a. Not corrected for ties.

b. Grouping Variable: KELOMPOK

NPar Tests

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
SKALA	1,00	16	8,97	143,50
	3,00	16	24,03	384,50
	Total	32		

Test Statistics[b]

	SKALA
Mann-Whitney U	7,500
Wilcoxon W	143,500
Z	-4,820
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000[a]

a. Not corrected for ties.

b. Grouping Variable: KELOMPOK

NPar Tests

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
SKALA	1,00	16	8,50	136,00
	4,00	16	24,50	392,00
	Total	32		

Test Statistics[b]

	SKALA
Mann-Whitney U	,000
Wilcoxon W	136,000
Z	-5,296
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000[a]

a. Not corrected for ties.

b. Grouping Variable: KELOMPOK

NPar Tests

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
SKALA	2,00	16	9,13	146,00
	3,00	16	23,88	382,00
	Total	32		

Test Statistics[b]

	SKALA
Mann-Whitney U	10,000
Wilcoxon W	146,000
Z	-4,700
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000[a]

a. Not corrected for ties.

b. Grouping Variable: KELOMPOK

NPar Tests

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
SKALA	2,00	16	8,50	136,00
	4,00	16	24,50	392,00
	Total	32		

Test Statistics[b]

	SKALA
Mann-Whitney U	,000
Wilcoxon W	136,000
Z	-5,254
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000[a]

a. Not corrected for ties.

b. Grouping Variable: KELOMPOK

NPar Tests

Mann-Whitney Test

Ranks

	KELOMPOK	N	Mean Rank	Sum of Ranks
SKALA	3,00	16	9,34	149,50
	4,00	16	23,66	378,50
	Total	32		

Test Statistics[b]

	SKALA
Mann-Whitney U	13,500
Wilcoxon W	149,500
Z	-4,733
Asymp. Sig. (2-tailed)	,000
Exact Sig. [2*(1-tailed Sig.)]	,000[a]

a. Not corrected for ties.

b. Grouping Variable: KELOMPOK

Kelompok 1

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	S2	117,3750	16	11,91008	2,97752
	S1	120,3125	16	9,30748	2,32687
Pair 2	D2	72,0625	16	8,78232	2,19558
	D1	75,5625	16	7,02347	1,75587
Pair 3	MAP2	86,0000	16	9,19420	2,29855
	MAP1	88,8125	16	7,40467	1,85117
Pair 4	NADI2	85,1875	16	10,99223	2,74806
	NADI1	92,0000	16	16,24808	4,06202

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	S2 - S1	-2,93750	8,25808	2,06452	-7,33792	1,46292	-1,423	15	,175
Pair 2	D2 - D1	-3,50000	5,73876	1,43469	-6,55797	-,44203	-2,440	15	,028
Pair 3	MAP2 - MAP1	-2,81250	6,91104	1,72776	-6,49513	,87013	-1,628	15	,124
Pair 4	NADI2 - NADI1	-6,81250	8,88608	2,22152	-11,54756	-2,07744	-3,067	15	,008

Kelompok 2

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	S2	117,1875	16	10,09435	2,52359
	S1	123,4375	16	12,80088	3,20022
Pair 2	D2	70,9375	16	9,55314	2,38829
	D1	73,5000	16	8,02496	2,00624
Pair 3	MAP2	85,4375	16	7,34819	1,83705
	MAP1	90,0000	16	8,31064	2,07766
Pair 4	NADI2	87,6875	16	12,41890	3,10473
	NADI1	95,9375	16	11,76701	2,94175

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	S2 - S1	-6,25000	9,58123	2,39531	-11,35548	-1,14452	-2,609	15	,020
Pair 2	D2 - D1	-2,56250	8,17287	2,04322	-6,91752	1,79252	-1,254	15	,229
Pair 3	MAP2 - MAP1	-4,56250	7,84830	1,96208	-8,74456	-,38044	-2,325	15	,034
Pair 4	NADI2 - NADI1	-8,25000	6,92339	1,73085	-11,93921	-4,56079	-4,766	15	,000

Kelompok 3

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	S2	128,5625	16	13,10455	3,27614
	S1	122,5625	16	10,74535	2,68634
Pair 2	D2	71,1875	16	10,59697	2,64924
	D1	70,1875	16	9,04963	2,26241
Pair 3	MAP2	88,5625	16	9,62614	2,40653
	MAP1	86,4375	16	7,57160	1,89290
Pair 4	NADI2	100,0000	16	17,68615	4,42154
	NADI1	93,7500	16	14,85261	3,71315

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	S2 - S1	6,00000	10,40513	2,60128	,45550	11,54450	2,307	15	,036
Pair 2	D2 - D1	1,00000	8,12404	2,03101	-3,32899	5,32899	,492	15	,630
Pair 3	MAP2 - MAP1	2,12500	7,40158	1,85039	-1,81902	6,06902	1,148	15	,269
Pair 4	NADI2 - NADI1	6,25000	8,88819	2,22205	1,51382	10,98618	2,813	15	,013

Kelompok 4

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	S2	134,0625	16	6,70789	1,67697
	S1	119,8125	16	7,41367	1,85342
Pair 2	D2	76,9375	16	7,17838	1,79460
	D1	69,1875	16	8,69650	2,17413
Pair 3	MAP2	97,4375	16	11,02705	2,75676
	MAP1	85,7500	16	7,22496	1,80624
Pair 4	NADI2	93,8125	16	12,63444	3,15861
	NADI1	81,0000	16	12,70171	3,17543

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	S2 - S1	14,25000	5,57973	1,39493	11,27677	17,22323	10,216	15	,000
Pair 2	D2 - D1	7,75000	4,82355	1,20589	5,17971	10,32029	6,427	15	,000
Pair 3	MAP2 - MAP1	11,68750	6,25799	1,56450	8,35285	15,02215	7,470	15	,000
Pair 4	NADI2 - NADI1	12,81250	2,42813	,60703	11,51864	14,10636	21,107	15	,000

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
S	1,00	16	-2,9375	8,25808	2,06452	-7,3379	1,4629	-15,00	16,00
	2,00	16	-6,2500	9,58123	2,39531	-11,3555	-1,1445	-33,00	12,00
	3,00	16	6,0000	10,40513	2,60128	,4555	11,5445	-12,00	22,00
	4,00	16	14,2500	5,57973	1,39493	11,2768	17,2232	4,00	24,00
	Total	64	2,7656	11,67652	1,45956	-,1511	5,6823	-33,00	24,00
D	1,00	16	-3,5000	5,73876	1,43469	-6,5580	-,4420	-13,00	3,00
	2,00	16	-2,5625	8,17287	2,04322	-6,9175	1,7925	-18,00	11,00
	3,00	16	1,0000	8,12404	2,03101	-3,3290	5,3290	-15,00	12,00
	4,00	16	7,7500	4,82355	1,20589	5,1797	10,3203	,00	20,00
	Total	64	,6719	8,05153	1,00644	-1,3393	2,6831	-18,00	20,00
MAP	1,00	16	-2,8125	6,91104	1,72776	-6,4951	,8701	-13,00	10,00
	2,00	16	-4,5625	7,84830	1,96208	-8,7446	-,3804	-28,00	5,00
	3,00	16	2,1250	7,40158	1,85039	-1,8190	6,0690	-14,00	13,00
	4,00	16	11,6875	6,25799	1,56450	8,3528	15,0222	5,00	31,00
	Total	64	1,6094	9,42913	1,17864	-,7460	3,9647	-28,00	31,00
NADI	1,00	16	-6,8125	8,88608	2,22152	-11,5476	-2,0774	-27,00	4,00
	2,00	16	-8,2500	6,92339	1,73085	-11,9392	-4,5608	-24,00	-2,00
	3,00	16	6,2500	8,88819	2,22205	1,5138	10,9862	-11,00	24,00
	4,00	16	12,8125	2,42813	,60703	11,5186	14,1064	7,00	18,00
	Total	64	1,0000	11,40593	1,42574	-1,8491	3,8491	-27,00	24,00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
S	Between Groups	4098,547	3	1366,182	18,253	,000
	Within Groups	4490,938	60	74,849		
	Total	8589,484	63			
D	Between Groups	1249,172	3	416,391	8,813	,000
	Within Groups	2834,938	60	47,249		
	Total	4084,109	63			
MAP	Between Groups	2551,672	3	850,557	16,735	,000
	Within Groups	3049,563	60	50,826		
	Total	5601,234	63			
NADI	Between Groups	5019,125	3	1673,042	31,598	,000
	Within Groups	3176,875	60	52,948		
	Total	8196,000	63			

Post Hoc Tests

Multiple Comparisons

LSD

Dependent Variable	(I) KELOMPOK	(J) KELOMPOK	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
S	1,00	2,00	3,31250	3,05878	,283	-2,8060	9,4310
		3,00	-8,93750*	3,05878	,005	-15,0560	-2,8190
		4,00	-17,18750*	3,05878	,000	-23,3060	-11,0690
	2,00	1,00	-3,31250	3,05878	,283	-9,4310	2,8060
		3,00	-12,25000*	3,05878	,000	-18,3685	-6,1315
		4,00	-20,50000*	3,05878	,000	-26,6185	-14,3815
	3,00	1,00	8,93750*	3,05878	,005	2,8190	15,0560
		2,00	12,25000*	3,05878	,000	6,1315	18,3685
		4,00	-8,25000*	3,05878	,009	-14,3685	-2,1315
	4,00	1,00	17,18750*	3,05878	,000	11,0690	23,3060
		2,00	20,50000*	3,05878	,000	14,3815	26,6185
		3,00	8,25000*	3,05878	,009	2,1315	14,3685
D	1,00	2,00	-,93750	2,43025	,701	-5,7987	3,9237
		3,00	-4,50000	2,43025	,069	-9,3612	,3612
		4,00	-11,25000*	2,43025	,000	-16,1112	-6,3888
	2,00	1,00	,93750	2,43025	,701	-3,9237	5,7987
		3,00	-3,56250	2,43025	,148	-8,4237	1,2987
		4,00	-10,31250*	2,43025	,000	-15,1737	-5,4513
	3,00	1,00	4,50000	2,43025	,069	-,3612	9,3612
		2,00	3,56250	2,43025	,148	-1,2987	8,4237
		4,00	-6,75000*	2,43025	,007	-11,6112	-1,8888
	4,00	1,00	11,25000*	2,43025	,000	6,3888	16,1112
		2,00	10,31250*	2,43025	,000	5,4513	15,1737
		3,00	6,75000*	2,43025	,007	1,8888	11,6112
MAP	1,00	2,00	1,75000	2,52057	,490	-3,2919	6,7919
		3,00	-4,93750	2,52057	,055	-9,9794	,1044
		4,00	-14,50000*	2,52057	,000	-19,5419	-9,4581
	2,00	1,00	-1,75000	2,52057	,490	-6,7919	3,2919
		3,00	-6,68750*	2,52057	,010	-11,7294	-1,6456
		4,00	-16,25000*	2,52057	,000	-21,2919	-11,2081
	3,00	1,00	4,93750	2,52057	,055	-,1044	9,9794
		2,00	6,68750*	2,52057	,010	1,6456	11,7294
		4,00	-9,56250*	2,52057	,000	-14,6044	-4,5206
	4,00	1,00	14,50000*	2,52057	,000	9,4581	19,5419
		2,00	16,25000*	2,52057	,000	11,2081	21,2919
		3,00	9,56250*	2,52057	,000	4,5206	14,6044
NADI	1,00	2,00	1,43750	2,57264	,578	-3,7086	6,5836
		3,00	-13,06250*	2,57264	,000	-18,2086	-7,9164
		4,00	-19,62500*	2,57264	,000	-24,7711	-14,4789
	2,00	1,00	-1,43750	2,57264	,578	-6,5836	3,7086
		3,00	-14,50000*	2,57264	,000	-19,6461	-9,3539
		4,00	-21,06250*	2,57264	,000	-26,2086	-15,9164
	3,00	1,00	13,06250*	2,57264	,000	7,9164	18,2086
		2,00	14,50000*	2,57264	,000	9,3539	19,6461
		4,00	-6,56250*	2,57264	,013	-11,7086	-1,4164
	4,00	1,00	19,62500*	2,57264	,000	14,4789	24,7711
		2,00	21,06250*	2,57264	,000	15,9164	26,2086
		3,00	6,56250*	2,57264	,013	1,4164	11,7086

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

IRAMA1 * KELOMPOK Crosstabulation

			KELOMPOK				
			1,00	2,00	3,00	4,00	Total
IRAMA1	1,00	Count	16	16	15	15	62
		% within KELOMPOK	100,0%	100,0%	93,8%	93,8%	96,9%
	2,00	Count	0	0	1	1	2
		% within KELOMPOK	,0%	,0%	6,3%	6,3%	3,1%
Total		Count	16	16	16	16	64
		% within KELOMPOK	100,0%	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2,065[a]	3	,559
Likelihood Ratio	2,837	3	,417
Linear-by-Linear Association	1,626	1	,202
N of Valid Cases	64		

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

IRAMA1 * IRAMA2 * KELOMPOK Crosstabulation

KELOMPOK				IRAMA2		Total
				1,00	2,00	
1,00	IRAMA1	1,00	Count	16		16
			% of Total	100,0%		100,0%
	Total		Count	16		16
			% of Total	100,0%		100,0%
2,00	IRAMA1	1,00	Count	16		16
			% of Total	100,0%		100,0%
	Total		Count	16		16
			% of Total	100,0%		100,0%
3,00	IRAMA1	1,00	Count	10	5	15
			% of Total	62,5%	31,3%	93,8%
		2,00	Count	0	1	1
			% of Total	,0%	6,3%	6,3%
	Total		Count	10	6	16
			% of Total	62,5%	37,5%	100,0%
4,00	IRAMA1	1,00	Count	13	2	15
			% of Total	81,3%	12,5%	93,8%
		2,00	Count	0	1	1
			% of Total	,0%	6,3%	6,3%
	Total		Count	13	3	16
			% of Total	81,3%	18,8%	100,0%

Chi-Square Tests

KELOMPOK		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
1,00	McNemar-Bowker Test	.	.	.[a]	
	N of Valid Cases	16			
2,00	McNemar-Bowker Test	.	.	.[a]	
	N of Valid Cases	16			
3,00	N of Valid Cases	16			
	McNemar Test				,063[b]
4,00	N of Valid Cases	16			
	McNemar Test				,500[b]

a. Computed only for a PxP table, where P must be greater than 1.

b. Binomial distribution used.