

## DAFTAR PUSTAKA

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## LAMPIRAN

### Lampiran 1. Surat Izin Penelitian Tingkat Provinsi



**PEMERINTAH PROVINSI SULAWESI SELATAN**  
**DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU**

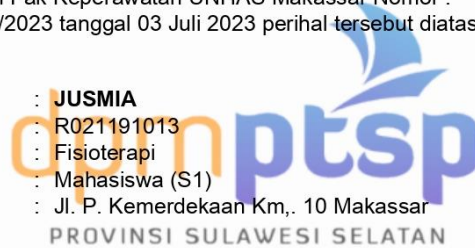
Jl. Bougainville No.5 Telp. (0411) 441077 Fax. (0411) 448936  
Website : <http://simap-new.sulselprov.go.id> Email : [ptsp@sulselprov.go.id](mailto:ptsp@sulselprov.go.id)  
Makassar 90231

Nomor : **20689/S.01/PTSP/2023** Kepada Yth.  
Lampiran : - Pimpinan Pondok Darul Aman  
Perihal : Izin penelitian Gombara Makassar

di-  
Tempat

Berdasarkan surat Dekan Fak Keperawatan UNHAS Makassar Nomor :  
2021/UN4.18.1/PT.01.04/2023 tanggal 03 Juli 2023 perihal tersebut diatas, mahasiswa/peneliti  
dibawah ini:

N a m a : **JUSMIA**  
Nomor Pokok : **R021191013**  
Program Studi : **Fisioterapi**  
Pekerjaan/Lembaga : **Mahasiswa (S1)**  
Alamat : **Jl. P. Kemerdekaan Km,. 10 Makassar**



Bermaksud untuk melakukan penelitian di daerah/kantor saudara dalam rangka menyusun SKRIPSI,  
dengan judul :

**" HUBUNGAN ANTARA FLEKSIBILITAS LUMBAL DENGAN KURVA LORDOSIS LUMBAL PADA  
SISWI TAKHASSUS PONDOK PESANTREN DARUL AMAN GOMBARA KOTA MAKASSAR "**

Yang akan dilaksanakan dari : Tgl. **06 Juli s/d 06 Agustus 2023**

Sehubungan dengan hal tersebut diatas, pada prinsipnya kami **menyetujui** kegiatan dimaksud  
dengan ketentuan yang tertera di belakang surat izin penelitian.

Demikian Surat Keterangan ini diberikan agar dipergunakan sebagaimana mestinya.

Diterbitkan di Makassar  
Pada Tanggal 06 Juli 2023

A.n. GUBERNUR SULAWESI SELATAN  
PLT. KEPALA DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU  
SATU PINTU PROVINSI SULAWESI SELATAN



**Drs. MUH SALEH, M.Si.**  
Pangkat : PEMBINA UTAMA MUDA  
Nip : 19690717 199112 1002

Tembusan Yth  
1. Dekan Fak Keperawatan UNHAS Makassar di Makassar;  
2. *Pertinggal.*

## Lampiran 2. Surat Keterangan Lolos Kaji Etik



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN  
RISET, DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN  
FAKULTAS KESEHATAN MASYARAKAT

Jln. Perintis Kemerdekaan Km. 10 Makassar 90245, Telp. (0411) 585658,  
E-mail : [fk.m.unhas@gmail.com](mailto:fk.m.unhas@gmail.com), website: <https://fk.m.unhas.ac.id/>

### REKOMENDASI PERSETUJUAN ETIK

Nomor: 4553/UN4.14.1/TP.01.02/2023

Tanggal: 24 Juli 2023

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No. Protokol	14723091229	No. Sponsor Protokol	
Peneliti Utama	<b>Jusmia</b>	Sponsor	Pribadi
Judul Peneliti	<b>Hubungan Antara Fleksibilitas Lumbal dengan Kurva Lordosis Lumbal pada Siswi Takhassus Pondok Pesantren Darul Aman Gombara Kota Makassar</b>		
No. Versi Protokol	1	Tanggal Versi	14 Juli 2023
No. Versi PSP	1	Tanggal Versi	14 Juli 2023
Tempat Penelitian	<b>Pondok Pesantren Darul Aman Gombara Kota Makassar</b>		
Judul Review	<input checked="" type="checkbox"/> Exempted <input type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku <b>24 Juli 2023</b> Sampai <b>24 Juli 2024</b>	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian	Nama : Prof.dr.Veni Hadju,M.Sc,Ph.D	Tanda tangan 	Tanggal 24 Juli 2023 
Sekretaris komisi Etik Penelitian	Nama : Dr. Wahiduddin, SKM.,M.Kes	Tanda tangan 	Tanggal 24 Juli 2023 

Kewajiban Peneliti Utama :

1. Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
2. Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
3. Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
4. Menyerahkan laporan akhir setelah Penelitian berakhir
5. Melaporaku penyimpangan dari protocol yang disetujui (protocol deviation/violation)
6. Mematuhi semua peraturan yang ditentukan



### Lampiran 3. Surat Persetujuan Penelitian



#### SURAT PERSETUJUAN

Yang bertanda tangan di bawah ini :

Nama : Syahrul, S.Kep, Ns, M.Kes., Ph.D.  
NIP : 19820419 200604 1 002  
Jabatan : Wakil Dekan Bidang Akademik dan Kemahasiswaan Fakultas Keperawatan Universitas Hasanuddin

Menyetujui yang bersangkutan dibawah ini :

Nama : Jusmia  
Jabatan : Mahasiswa Fak. Keperawatan Univ. Hasanuddin  
NIM : R021191013  
Program Studi : Fisioterapi

Untuk melakukan penelitian dengan metode *Kuantitatif*, dengan judul :

“Hubungan Antara Fleksibilitas Lumbal dengan Kurva Lordosis Lumbal pada Siswi Takhasus Pondok Pesantren Darul Aman Gombara Kota Makassar.”

Demikian surat ini dibuat, untuk dipergunakan sebagaimana mestinya.

Makassar, 3 Juli 2023

Wakil Dekan Bidang Akademik dan  
Kemahasiswaan  
  
Syahrul, S.Kep, Ns, M.Kes., Ph.D.  
NIP: 19820419 200604 1 002

Tembusan :

1. Ketua Program Studi Fisioterapi Fak. Kep. Unhas
2. Kepala Bagian Tata Usaha
3. Arsip



## Lampiran 4. Surat Telah Menyelesaikan Penelitian



Nomor : 56/ DA / 1443  
Lampiran : 1 lembar  
Hal : Penelitian

Makassar, 10 Juli 2023

Kepada yang terhormat,  
**Keperawatan**  
**Universitas Hasanuddin**  
di -  
Makassar

**Assalamu Alaikum Warahmatullahi Wabarakatuh**

Dengan Hormat,

Berdasarkan permohonan pengajuan penelitian mahasiswa berikut :

Nama : **Jusmia**  
Nomor Pokok : **R021191013**  
Program Studi : **Fisioterapi**  
Alamat : **Perumahan Graha Kampus Tamalanrea Blok E14**

Dengan judul Penelitian : **Hubungan Antara Fleksibilitas Lumbal dengan Kurva Lordosis Lumbal pada Siswi Takhassus Pondok Pesantren Darul Aman Gombara Makassar**

Bersama ini kami sampaikan bahwa mahasiswa tersebut di atas **telah melakukan penelitian** di Pondok Pesantren Darul Aman Gombara Makassar pada tanggal 22 Juni - 07 Juli 2023..

Atas Perhatian dan kerjasamanya, kami ucapkan terima kasih.

**Walaikum Salam Warahmatullahi Wabarakatuh**



**Muhammad Yusuf Mantasya, Lc**

**Tembusan :**

1. Ketua Yayasan Buq'atun Mubarakah Pusat Gombara
2. Kepala Sekolah SMP Buq'atun Mubarakah
3. Kepala Sekolah SMA Buq'atun Mubarakah

PONDOK PESANTREN  
**DARUL AMAN**  
TK-SD-DTA-SMP-SMA

YAYASAN BUQ'ATUN MUBARAKAH  
PONDOK PESANTREN DARUL AMAN  
Jl. KH. Abd Djabbar Ashiry No 1 Gombara  
Kel. Poi. Kec. Biringkanaya Kota Makassar 90243  
Telp. 041-8037652 email pesantren@darulaman.sch.id  
<http://www.darulaman.sch.id>

## Lampiran 5. Hasil Uji SPSS

### Usia

		Usia1			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10 - 13 Tahun	6	12.0	12.0	12.0
	14 - 17 Tahun	40	80.0	80.0	92.0
	18 - 21 Tahun	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

### Indeks Massa Tubuh

		IMT1			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Underweight	11	22.0	22.0	22.0
	Normal	27	54.0	54.0	76.0
	Overweight	4	8.0	8.0	84.0
	Obesitas I	5	10.0	10.0	94.0
	Obesitas II	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

### Waist Hip Ratio

		WHR1			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Beresiko Ringan	22	44.0	44.0	44.0
	Beresiko Sedang	16	32.0	32.0	76.0
	Beresiko Tinggi	12	24.0	24.0	100.0
	Total	50	100.0	100.0	

### Kurva Lordosis Lumbal

		KLL1			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hipolordosis	34	68.0	68.0	68.0
	Normal	8	16.0	16.0	84.0
	Hiperlordosis	8	16.0	16.0	100.0
	Total	50	100.0	100.0	

### Fleksibilitas Lumbal

**FL1**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Abnormal	23	46.0	46.0	46.0
	Normal	27	54.0	54.0	100.0
	Total	50	100.0	100.0	

**Lama duduk Sewaktu****Lama Duduk Sewaktu (Jam)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	8	16.0	16.0	16.0
	3	37	74.0	74.0	90.0
	4	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

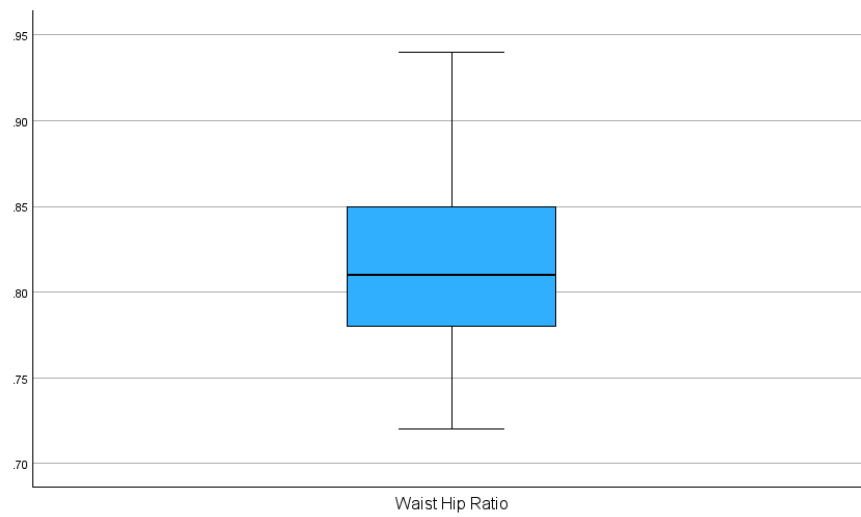
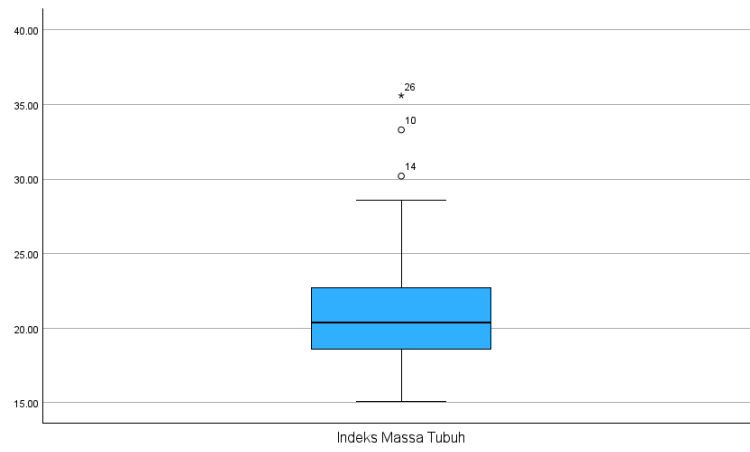
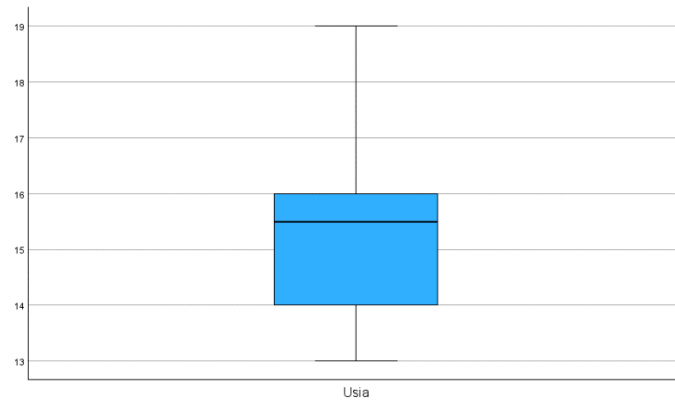
**Lama Duduk Sehari****Lama Duduk Sehari (Jam)**

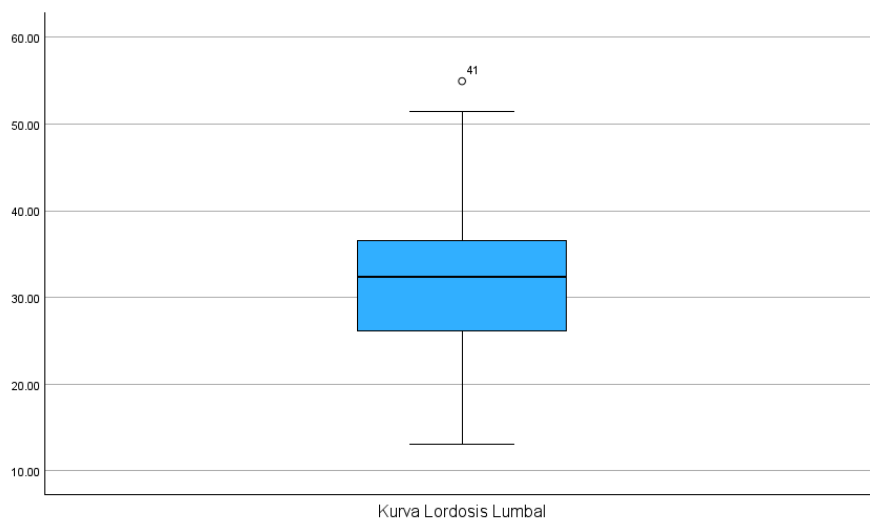
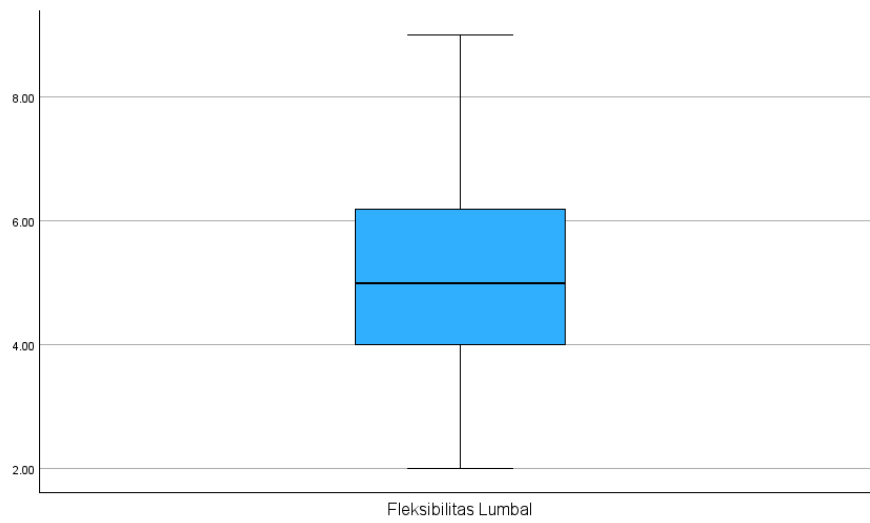
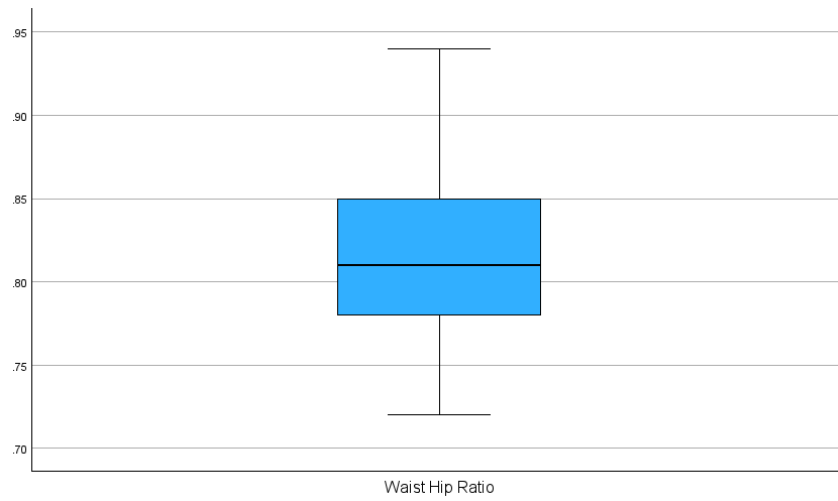
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	4	8.0	8.0	8.0
	6	3	6.0	6.0	14.0
	7	35	70.0	70.0	84.0
	8	8	16.0	16.0	100.0
	Total	50	100.0	100.0	

**Uji normalitas semua variabel****Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
LDH	.392	50	.000	.706	50	.000
LDS	.387	50	.000	.686	50	.000
Usia	.151	50	.006	.941	50	.014
Indeks Massa Tubuh	.140	50	.016	.884	50	.000
Waist Hip Ratio	.113	50	.143	.978	50	.459
Kurva Lordosis Lumbal	.114	50	.102	.960	50	.087
Fleksibilitas Lumbal	.202	50	.000	.952	50	.040

a. Lilliefors Significance Correction





## Nilai Min-max dan Median

### Report

Fleksibilitas Lumbal		Usia	Indeks Massa Tubuh	Waist Hip Ratio	Kurva Lordosis Lumbal
Abnormal	Median	16.00	20.2000	.8100	32.1400
	Minimum	13	15.10	.72	18.30
	Maximum	18	35.60	.94	51.50
Normal	Median	15.00	21.4000	.8100	32.5200
	Minimum	13	17.50	.72	13.08
	Maximum	19	28.60	.89	54.95
Total	Median	15.50	20.4000	.8100	32.3300
	Minimum	13	15.10	.72	13.08
	Maximum	19	35.60	.94	54.95

## Uji korelasi

### Correlations

			Usia	Indeks Massa Tubuh	Waist Hip Ratio	Fleksibilitas Lumbal
Spearman's rho	Usia	Correlation Coefficient	1.000	.109	.000	.210
		Sig. (2-tailed)	.	.452	.997	.142
		N	50	50	50	50
	Indeks Massa Tubuh	Correlation Coefficient	.109	1.000	.324*	.203
		Sig. (2-tailed)	.452	.	.022	.158
		N	50	50	50	50
	Waist Hip Ratio	Correlation Coefficient	.000	.324*	1.000	-.031
		Sig. (2-tailed)	.997	.022	.	.829
		N	50	50	50	50
	Fleksibilitas Lumbal	Correlation Coefficient	.210	.203	-.031	1.000
		Sig. (2-tailed)	.142	.158	.829	.
		N	50	50	50	50

\*. Correlation is significant at the 0.05 level (2-tailed).

## Uji normalitas LDS & LDH

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
LDS	.387	50	.000	.686	50	.000
LDH	.392	50	.000	.706	50	.000

a. Lilliefors Significance Correction

## Uji korelasi dengan WHR di kontrol

		Correlations							
			Usia	Indeks Massa Tubuh	Waist Hip Ratio	Kurva Lordosis Lumbal	Fleksibilitas Lumbal	LDH	LDS
Spearman's rho	Usia	Correlation Coefficient	1.000	.109	.000	.091	.210	.081	.072
		Sig. (2-tailed)	.	.452	.997	.531	.142	.577	.617
		N	50	50	50	50	50	50	50
	Indeks Massa Tubuh	Correlation Coefficient	.109	1.000	.324*	.275	.203	.108	.206
		Sig. (2-tailed)	.452	.	.022	.053	.158	.454	.152
		N	50	50	50	50	50	50	50
	Waist Hip Ratio	Correlation Coefficient	.000	.324*	1.000	.398**	-.031	.017	.011
		Sig. (2-tailed)	.997	.022	.	.004	.829	.908	.938
		N	50	50	50	50	50	50	50
	Kurva Lordosis Lumbal	Correlation Coefficient	.091	.275	.398**	1.000	.045	.058	-.080
		Sig. (2-tailed)	.531	.053	.004	.	.756	.687	.581
		N	50	50	50	50	50	50	50
	Fleksibilitas Lumbal	Correlation Coefficient	.210	.203	-.031	.045	1.000	.134	.446**
		Sig. (2-tailed)	.142	.158	.829	.756	.	.352	.001
		N	50	50	50	50	50	50	50
	LDH	Correlation Coefficient	.081	.108	.017	.058	.134	1.000	.438**
		Sig. (2-tailed)	.577	.454	.908	.687	.352	.	.001
		N	50	50	50	50	50	50	50
	LDS	Correlation Coefficient	.072	.206	.011	-.080	.446**	.438**	1.000
		Sig. (2-tailed)	.617	.152	.938	.581	.001	.001	.
		N	50	50	50	50	50	50	50

\*. Correlation is significant at the 0.05 level (2-tailed).

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

## korelasi dengan IMT di kontrol

		Correlations							
			Usia1	LDS1	LDH1	IMT1	WHR1	KLL1	FL1
Spearman's rho	Usia1	Correlation Coefficient	1.000	.242	.044	-.037	-.146	.068	.142
		Sig. (2-tailed)	.	.122	.783	.817	.357	.668	.370
		N	42	42	42	42	42	42	42
	LDS1	Correlation Coefficient	.242	1.000	.144	-.356*	-.514**	-.318*	-.014
		Sig. (2-tailed)	.122	.	.362	.021	.001	.040	.930
		N	42	42	42	42	42	42	42
	LDH1	Correlation Coefficient	.044	.144	1.000	.137	.055	.027	.188
		Sig. (2-tailed)	.783	.362	.	.388	.730	.866	.232
		N	42	42	42	42	42	42	42
	IMT1	Correlation Coefficient	-.037	-.356*	.137	1.000	.477**	.268	.194
		Sig. (2-tailed)	.817	.021	.388	.	.001	.086	.217
		N	42	42	42	42	42	42	42
	WHR1	Correlation Coefficient	-.146	-.514**	.055	.477**	1.000	.442**	-.015
		Sig. (2-tailed)	.357	.001	.730	.001	.	.003	.923
		N	42	42	42	42	42	42	42
	KLL1	Correlation Coefficient	.068	-.318*	.027	.268	.442**	1.000	-.039
		Sig. (2-tailed)	.668	.040	.866	.086	.003	.	.806
		N	42	42	42	42	42	42	42
	FL1	Correlation Coefficient	.142	-.014	.188	.194	-.015	-.039	1.000
		Sig. (2-tailed)	.370	.930	.232	.217	.923	.806	.
		N	42	42	42	42	42	42	42

\*. Correlation is significant at the 0.05 level (2-tailed).

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

## Sebaran data disemua variable

**Kurva Lordosis Lumbal \* Fleksibilitas Lumbal \* IMT \* WHR Crosstabulation**

				Fleksibilitas Lumbal		Total
WHR	IMT			Abnormal	Normal	
Beresiko Ringan	Underweight	Kurva Lordosis Lumbal	Hipolordosis	3	5	8
		Total		3	5	8
	Normal	Kurva Lordosis Lumbal	Hipolordosis	6	3	9
			Hiperlordosis	0	1	1
	Total			6	4	10
	Overweight	Kurva Lordosis Lumbal	Normal	1		1
		Total			1	
	Obesitas I	Kurva Lordosis Lumbal	Hipolordosis		1	1
			Normal		1	1
	Total				2	2
	Obesitas II	Kurva Lordosis Lumbal	Hipolordosis	1		1
		Total			1	
Total	Kurva Lordosis Lumbal	Hipolordosis	10	9	19	
		Normal	1	1	2	
		Hiperlordosis	0	1	1	
Total			11	11	22	
Beresiko Sedang	Underweight	Kurva Lordosis Lumbal	Hipolordosis	1	0	1
			Normal	1	1	2
	Total			2	1	3
	Normal	Kurva Lordosis Lumbal	Hipolordosis	2	3	5
			Normal	1	0	1
		Hiperlordosis	0	3	3	
	Total			3	6	9
	Overweight	Kurva Lordosis Lumbal	Hipolordosis	1		1
		Total			1	
	Obesitas I	Kurva Lordosis Lumbal	Hipolordosis		1	1
			Hiperlordosis		1	1
	Total				2	2
	Obesitas II	Kurva Lordosis Lumbal	Hipolordosis	1		1
		Total			1	
	Total	Kurva Lordosis Lumbal	Hipolordosis	5	4	9
			Normal	2	1	3
			Hiperlordosis	0	4	4
	Total			7	9	16
Beresiko Tinggi	Normal	Kurva Lordosis Lumbal	Hipolordosis	0	3	3
			Normal	1	1	2
			Hiperlordosis	2	1	3
	Total			3	5	8
	Overweight	Kurva Lordosis Lumbal	Hipolordosis	1	0	1
			Normal	0	1	1
	Total			1	1	2
	Obesitas I	Kurva Lordosis Lumbal	Hipolordosis		1	1
		Total			1	
	Obesitas II	Kurva Lordosis Lumbal	Hipolordosis	1		1
		Total			1	
	Total	Kurva Lordosis Lumbal	Hipolordosis	2	4	6
		Normal	1	2	3	
		Hiperlordosis	2	1	3	
Total			5	7	12	
Total	Underweight	Kurva Lordosis Lumbal	Hipolordosis	4	5	9
			Normal	1	1	2
	Total			5	6	11
	Normal	Kurva Lordosis Lumbal	Hipolordosis	8	9	17
			Normal	2	1	3
		Hiperlordosis	2	5	7	
	Total			12	15	27
	Overweight	Kurva Lordosis Lumbal	Hipolordosis	2	0	2
			Normal	1	1	2
	Total			3	1	4
	Obesitas I	Kurva Lordosis Lumbal	Hipolordosis		3	3
			Normal		1	1
		Hiperlordosis		1	1	
	Total				5	5
	Obesitas II	Kurva Lordosis Lumbal	Hipolordosis	3		3
		Total			3	
	Total	Kurva Lordosis Lumbal	Hipolordosis	17	17	34
			Normal	4	4	8
		Hiperlordosis	2	6	8	
Total			23	27	50	



## Deskripsi umum semua variable

### Descriptives

		Statistic	Std. Error	
Usia	Mean	15.42	.214	
	95% Confidence Interval for Mean	Lower Bound	14.99	
		Upper Bound	15.85	
	5% Trimmed Mean	15.37		
	Median	15.50		
	Variance	2.289		
	Std. Deviation	1.513		
	Minimum	13		
	Maximum	19		
	Range	6		
	Interquartile Range	2		
	Skewness	.270	.337	
	Kurtosis	-.135	.662	
	Indeks Massa Tubuh	Mean	21.4420	.58018
95% Confidence Interval for Mean		Lower Bound	20.2761	
		Upper Bound	22.6079	
5% Trimmed Mean		21.0800		
Median		20.4000		
Variance		16.831		
Std. Deviation		4.10252		
Minimum		15.10		
Maximum		35.60		
Range		20.50		
Interquartile Range		4.25		
Skewness		1.511	.337	
Kurtosis		2.904	.662	
Waist Hip Ratio		Mean	.8140	.00682
	95% Confidence Interval for Mean	Lower Bound	.8003	
		Upper Bound	.8277	
	5% Trimmed Mean	.8136		
	Median	.8100		
	Variance	.002		
	Std. Deviation	.04823		
	Minimum	.72		
	Maximum	.94		
	Range	.22		
	Interquartile Range	.07		
	Skewness	.278	.337	
	Kurtosis	-.207	.662	
	Kurva Lordosis Lumbal	Mean	32.5890	1.30912
95% Confidence Interval for Mean		Lower Bound	29.9582	
		Upper Bound	35.2198	
5% Trimmed Mean		32.3571		
Median		32.3300		
Variance		85.690		
Std. Deviation		9.25687		
Minimum		13.08		
Maximum		54.95		
Range		41.87		
Interquartile Range		10.68		
Skewness		.568	.337	
Kurtosis		.205	.662	
Fleksibilitas Lumbal		Mean	5.1480	.19951
	95% Confidence Interval for Mean	Lower Bound	4.7471	
		Upper Bound	5.5489	
	5% Trimmed Mean	5.1044		
	Median	5.0000		
	Variance	1.990		
	Std. Deviation	1.41078		
	Minimum	2.00		
	Maximum	9.00		
	Range	7.00		
	Interquartile Range	2.22		
	Skewness	.582	.337	
	Kurtosis	.245	.662	

**Lampiran 6. Dokumentasi Penelitian**



Pengisian Biodata  
Responden



Pengukuran  
kurva lordosis lumbal



Pengukuran lingkaran  
pinggang & lingkaran panggul



Pengukuran  
Fleksibilitas lumbal



Pengukuran berat badan



Pengukuran tinggi badan

**LEMBAR PERSETUJUAN**

Yang bertanda tangan dibawah ini :

Nama/inisial : *Aqilah Shaista Ahnaf*

Usia : *16*

Jenis kelamin : *Perempuan*

Setelah mendapatkan penjelasan dari peneliti terkait pemeriksaan dan pengukuran yang akan dilakukan, saya bersedia menjadi responden penelitian yang berjudul "Hubungan Antara Fleksibilitas lumbal dengan Kurva Lordosis Lumbal pada Siswi *Takhassus* Pondok Pesantren Darul Aman Gombara Kota Makassar" yang akan dilakukan oleh Jusmia mahasiswa Program Studi S1 Fisioterapi Fakultas Keperawatan Universitas Hasanuddin.

Demikian lembar persetujuan ini dibuat dengan penuh kesadaran dan tanpa paksaan dari pihak lain untuk dipergunakan sebagaimana mestinya.

Makassar, 6 Juni 2023

Responden

( *Aqilah* )

Penanggung Jawab Penelitian

Nama : Jusmia

NIM : R021191013

## Lampiran 8 Formulir Pengukuran Fleksibilitas Lumbal

### PENGGUKURAN FLEKSIBILITAS LUMBAL

*Modified-modified Schober Test (MMST)*

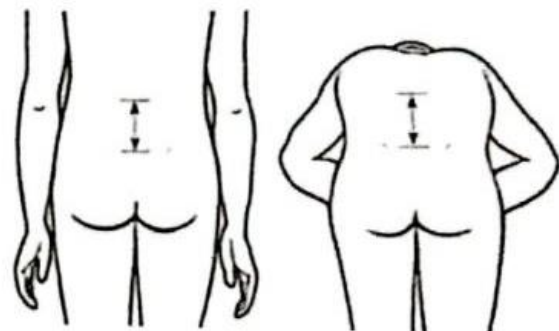
Tgl pemeriksaan : 6 Juni 2023

#### IDENTITAS RESPONDEN

Nama : Anika Rhanista Ramf  
Kelas : KB<sup>2</sup>  
Usia : 16 tahun  
Jenis kelamin : Perempuan  
Berat badan (BB) : 48 kg  
Tinggi badan (TB) : 146,5 cm  
IMT : 22,9 kg/m<sup>2</sup>  
Lingkar Pinggang : 70 cm  
Lingkar Panggul : 89 cm  
WHR : 0,83 cm  
Lama duduk/hari : 5-8 jam (3 jam)  
Riwayat penyakit : -  
Riwayat cedera vertebra : -  
(LBP)  
Hasil Schober Test : 15-22 → (7 cm)

Interpretasi <5 cm (Penurunan Fleksibilitas)

≥5 cm (Normal) ✓



Lampiran 9. Formulir Pengukuran Kurva Lordosis Lumbal

PENGKUKURAN KURVA LORDOSIS LUMBAL

Tgl pemeriksaan : 6 Jan 2023

Nama

: Agila Shafiqah Anaf.

Kelas

: 16 tahun x b2

Lordosis indeks

$$\theta = 4 \arctan \frac{2H}{L}$$

$$: 4 \arctan \frac{2(0,9)}{8} = 50,72^\circ$$

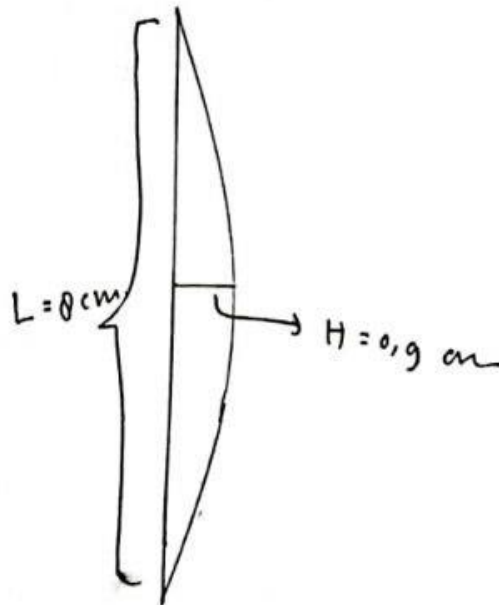
Interpretasi

: <35° (Hipolordosis)

35°-40° (Normal)

>40° (Hiperlordosis) ✓

Flexicurve ruler print



## Lampiran 10. Riwayat Peneliti

### BIODATA PENELITI UTAMA

#### Data Pribadi

Nama : Jusmia  
Tempat, tanggal lahir : Bone, 10 Juli 2000  
Jenis Kelamin : Perempuan  
Agama : Islam  
Email : [jusmia.miaminoz@gmail.com](mailto:jusmia.miaminoz@gmail.com)  
Fakultas/ Jurusan : Fakultas Keperawatan/Fisioterapi  
NIM : R021191013  
Bidang Keahlian : Fisioterapi  
Alamat Asal : Tanjonge, Desa Marioraja Kecamatan Marioriwawo  
Kabupaten Soppeng  
Alamat Sekarang : Perumahan Graga Kampus Tamalanrea Blok E/14  
Nama Ayah : A. Baba  
Nama Ibu : Sania



#### A. Riwayat Pendidikan

STRATA	INSTITUSI	TEMPAT	TAHUN LULUS
S1	Program Studi S1 Fisioterapi Universitas Hasanuddin	Makassar	2019- Sekarang
SMA	SMAN 20 Bone	Bone	2015-2018
SMP	SMPN 3 Marioriwawo	Soppeng	2013-2016
SD	SDN 144 Madello	Soppeng	2007-2013

#### B. Riwayat Pelatihan/Diklat

ORGANISASI	TAHUN LULUS
Koordinator Departemen Pengembangan Sumber Daya Manusia (PSDM) BEM F.Kep-UH	2023
Komisi Hukum dan Kebijakan Dewan Tinggi TBF Sternum Himafisio F.Kep.UH	2023
Koordinator Divisi Hubungan Luar TBF Sternum Himafisio F.KEP-UH	2021-2022
Anggota Divisi Kaderisasi Himafisio F.Kep-UH	2021-2022
LK 1 Himafisio F.KEP-UH	2019



Original Article

## Correlation Between Lumbar Flexibility and Lumbar Lordosis Curve in Takhassus Students at Darul Aman Gombara Islamic Boarding School, Makassar City

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Physiotherapy Studi Program, Faculty of Nursing, Hasanuddin University

Corresponding Author:

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### ARTICLE INFO

**Keywords:**

Flexibility; Lumbar Flexibility; Lumbar Lordosis Curve; Takhassus

**How to cite:**

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### ABSTRACT

**Introduction:** Flexibility is defined as the range of ability of a particular joint or group of joints within a functional unit to move optimally smoothly and pain-free. Lumbar flexibility refers to the range of motion in the lumbar area through activation of the associated muscles. In addition, the lumbar anatomically forms a lordosis curve in accordance with its function, which plays a role in maintaining the body's balance posturally. The existence of conditions of poor flexibility and a changing lordosis curve either decreases (hypolordosis) or increases (hyperlordosis) can cause complaints of Musculoskeletal Disorders (MSDs) which will affect a person's productivity and quality of life. The purpose of this study was to determine the relationship between lumbar flexibility and lumbar lordosis curve in Takhassus (memorizing) Islamic boarding school students. **Methods:** This research is a type of correlational research with a cross sectional design using a purposive sampling technique of 50 samples of Takhassus students. Data collection was carried out by collecting primary data through measuring tape measuring instruments for lumbar flexibility with the Modified-Modified Schrober Test parameters, measuring lumbar lordosis curves using the flexicurve ruler instrument. **Results:** The data obtained from the correlation test using the Spearman Rho test obtained