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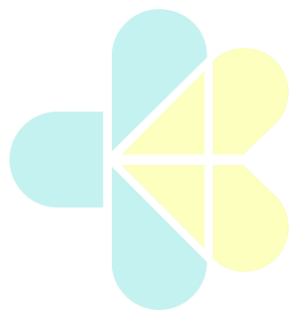
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A T T A C H M E N T



Kemenkes
Poltekkes Bengkulu

Attachment 1 Master Table

MASTER TABEL

No	Respondent Initials	Age	Gender	Education	Type of Stroke	Pretest Muscle Strength	Posttest Muscle Strength	Difference in Muscle Strength (Pre-Post)	Group
1.	Tn.A	45	Male	SMA	Hemoragik	3	5	2	Intervention
2.	Tn.N	67	Male	PT	Hemoragik	4	5	1	Intervention
3.	Ny.L	47	Female	SMP	Hemoragik	3	4	1	Intervention
4.	Tn.K	54	Male	SMA	Hemoragik	3	4	1	Intervention
5.	Ny.P	30	Female	PT	Hemoragik	3	4	1	Intervention
6.	Ny.O	65	Female	SMP	Iskemik	4	5	1	Intervention
7.	Tn.U	64	Male	SMA	Hemoragik	4	5	1	Intervention
8.	Ny.T	73	Female	SMA	Iskemik	4	5	1	Intervention
9.	Ny.I	51	Female	SMP	Hemoragik	3	5	2	Intervention
10.	Tn.R	67	Male	PT	Hemoragik	4	4	0	Intervention
11.	Tn.K	54	Male	SMA	Hemoragik	3	4	1	Intervention
12.	Tn.E	63	Male	SMA	Hemoragik	4	5	1	Intervention
13.	Ny.B	61	Female	SMP	Hemoragik	4	4	0	Intervention
14.	Tn.J	59	Male	SMP	Hemoragik	4	5	1	Intervention
15.	Ny.W	62	Female	SMP	Iskemik	4	5	1	Intervention
16.	Ny.H	59	Female	SMA	Hemoragik	4	5	1	Intervention

No	Respondent Initials	Age	Gender	Education	Type of Stroke	Pretest Muscle Strength	Posttest Muscle Strength	Difference in Muscle Strength (Pre-Post)	Group
17.	Tn.V	60	Male	PT	Hemoragik	4	5	1	Intervention
18.	Ny.Q	67	Female	SMP	Iskemik	4	4	0	Intervention
19.	Ny.C	66	Female	SMA	Hemoragik	3	4	1	Intervention
20.	Tn.X	54	Male	SMA	Hemoragik	3	4	1	Intervention
21.	Tn.F	51	Male	PT	Hemoragik	3	4	1	Intervention
22.	Tn.D	65	Male	PT	Hemoragik	4	4	0	Intervention
23.	Ny.S	67	Female	SMP	Hemoragik	4	5	1	Intervention
24.	Ny.LP	70	Female	SMA	Hemoragik	4	4	0	Intervention
25.	Tn.LW	55	Male	PT	Hemoragik	3	4	1	Intervention
26.	Tn.A	59	Male	SMA	Iskemik	4	4	0	Intervention
27.	Tn.FR	66	Male	SMP	Hemoragik	4	4	0	Intervention
28.	Tn.NM	72	Male	SMP	Hemoragik	4	5	1	Intervention
29.	Tn.H	67	Male	SMP	Iskemik	4	4	0	Intervention
30.	Tn.U	65	Male	PT	Hemoragik	4	4	0	Intervention
31.	Ny.P	70	Female	SMP	Hemoragik	4	4	0	Control
32.	Ny.R	65	Female	PT	Hemoragik	3	5	2	Control
33.	Ny.A	57	Female	PT	Hemoragik	4	4	0	Control
34.	Tn.W	61	Male	SMP	Iskemik	4	4	0	Control
35.	Tn.OI	66	Male	PT	Hemoragik	4	4	0	Control
36.	Tn.DF	68	Male	SMP	Hemoragik	4	5	1	Control

No	Respondent Initials	Age	Gender	Education	Type of Stroke	Pretest Muscle Strength	Posttest Muscle Strength	Difference in Muscle Strength (Pre-Post)	Group
37.	Tn.R	66	Male	SMA	Iskemik	4	4	0	Control
38.	Ny.Z	69	Female	SMA	Hemoragik	4	4	0	Control
39.	Ny.T	30	Female	SMA	Hemoragik	3	4	1	Control
40.	Tn.J	65	Male	PT	Hemoragik	3	4	1	Control
41.	Tn.R	64	Male	SMP	Iskemik	4	4	0	Control
42.	Tn.M	73	Male	SMP	Iskemik	4	5	1	Control
43.	Tn.V	50	Male	SMA	Hemoragik	4	4	0	Control
44.	Tn.Z	67	Male	PT	Iskemik	3	4	1	Control
45.	Tn.P	51	Male	SMA	Hemoragik	4	4	0	Control
46.	Ny.O	63	Female	SMP	Iskemik	4	4	0	Control
47.	Ny.L	61	Female	SMA	Iskemik	4	5	1	Control
48.	Tn.K	59	Male	SMA	Hemoragik	3	4	1	Control
49.	Ny.X	62	Female	SMA	Hemoragik	4	4	0	Control
50.	Ny.I	59	Female	SMP	Hemoragik	4	4	0	Control
51.	Tn.Ar	60	Male	SMA	Hemoragik	3	4	1	Control
52.	Tn.D	67	Male	SMP	Hemoragik	4	4	0	Control
53.	Ny.W	66	Female	SMP	Hemoragik	4	4	0	Control
54.	Tn.H	54	Male	SMP	Hemoragik	3	3	0	Control
55.	Tn.A	60	Male	PT	Iskemik	4	5	1	Control
56.	Tn.G	75	Male	SD	Iskemik	4	4	0	Control

No	Respondent Initials	Age	Gender	Education	Type of Stroke	Pretest Muscle Strength	Posttest Muscle Strength	Difference in Muscle Strength (Pre-Post)	Group
57.	Tn.H	54	Male	SMP	Hemoragik	4	4	0	Control
58.	Ny.F	52	Female	SD	Hemoragik	4	4	0	Control
59.	Ny.E	59	Female	SMA	Hemoragik	4	5	1	Control
60.	Ny.C	60	Female	SMP	Hemoragik	4	4	0	Control



Attachment 2 SPSS Output

OUTPUT SPSS

A. UNIVARIATE ANALYSIS

1. Overview of Respondent Characteristics

a. Age of Both Groups

		Descriptives		
	Kelompok		Statistic	Std. Error
Usia	intervensi	Mean	60,17	1,670
		95% Confidence Interval for Mean		
		Lower Bound	56,75	
		Upper Bound	63,58	
		5% Trimmed Mean	60,87	
		Median	62,50	
		Variance	83,661	
		Std. Deviation	9,147	
		Minimum	30	
		Maximum	73	
		Range	43	
		Interquartile Range	13	
		Skewness	-1,375	,427
		Kurtosis	2,733	,833
	kontrol	Mean	61,10	1,561
		95% Confidence Interval for Mean		
		Lower Bound	57,91	
		Upper Bound	64,29	
		5% Trimmed Mean	61,72	
		Median	61,50	
		Variance	73,059	
		Std. Deviation	8,547	
		Minimum	30	
		Maximum	75	
		Range	45	
		Interquartile Range	8	
		Skewness	-1,611	,427
		Kurtosis	4,991	,833

Tests of Normality

	Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Usia	intervensi	,149	30	,086	,896	30	,007
	kontrol	,170	30	,028	,886	30	,004

a. Lilliefors Significance Correction

b. Gender of Group Intervention

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-Laki	18	60,0	60,0	60,0
	Perempuan	12	40,0	40,0	100,0
	Total	30	100,0	100,0	

c. Gender of Group Control

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-Laki	17	56,7	56,7	56,7
	Perempuan	13	43,3	43,3	100,0
	Total	30	100,0	100,0	

d. Education of Group Intervention

Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SMA	11	36,7	36,7	36,7
	SMP	11	36,7	36,7	73,3
	PT	8	26,7	23,3	96,7
	SD	1	3,3	3,3	100,0
	Total	30	100,0	100,0	

e. Education of Group Control

		Education			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	SD	2	6,7	6,7	6,7
	SMP	12	40,0	40,0	46,7
	SMA	10	33,3	33,3	80,0
	PT	6	20,0	20,0	100,0
	Total	30	100,0	100,0	

f. Stroke Type in the Intervention Group

		Stroke Type			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	Hemoragik	24	80,0	80,0	80,0
	Iskemik	6	20,0	20,0	100,0
	Total	30	100,0	100,0	

g. Stroke Type in the Control Group

		Stroke Type			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	Hemoragik	21	70,0	70,0	70,0
	Iskemik	9	30,0	30,0	100,0
	Total	30	100,0	100,0	

Intervention Group Pretest and Posttest

Descriptives

Descriptives

	kelompok		Statistic	Std. Error
Pre_Test	Intervensi	Mean	3.67	.088
		95% Confidence Interval for Mean	Lower Bound	3.49
			Upper Bound	3.85
		5% Trimmed Mean	3.69	
		Median	4.00	
		Variance	.230	
		Std. Deviation	.479	
		Minimum	3	
		Maximum	4	
		Range	1	
		Interquartile Range	1	
		Skewness	-.745	.427
		Kurtosis	-1.554	.833
Post_Test	Intervensi	Mean	4.43	.092
		95% Confidence Interval for Mean	Lower Bound	4.25
			Upper Bound	4.62
		5% Trimmed Mean	4.43	
		Median	4.00	
		Variance	.254	
		Std. Deviation	.504	
		Minimum	4	
		Maximum	5	
		Range	1	
		Interquartile Range	1	
		Skewness	.283	.427
		Kurtosis	-2.062	.833

NORMALITY TEST

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Pre_Kekuatan_Otot	intervensi	,423	30	,000	,597	30	,000
Post_Kekuatan_Otot	intervensi	,372	30	,000	,632	30	,000

a. Lilliefors Significance Correction

Control Group Pretest and Posttest

		Descriptives		
	kelompok		Statistic	Std. Error
Pre_Test	Kontrol	Mean	3.77	.079
		95% Confidence Interval for Mean		
		Lower Bound	3.61	
		Upper Bound	3.93	
		5% Trimmed Mean	3.80	
		Median	4.00	
		Variance	.185	
		Std. Deviation	.430	
		Minimum	3	
		Maximum	4	
		Range	1	
		Interquartile Range	0	
		Skewness	-1.328	.427
		Kurtosis	-.257	.833
Post_Test	Kontrol	Mean	4.17	.084
		95% Confidence Interval for Mean		
		Lower Bound	3.99	
		Upper Bound	4.34	
		5% Trimmed Mean	4.17	
		Median	4.00	
		Variance	.213	
		Std. Deviation	.461	
		Minimum	3	
		Maximum	5	
		Range	2	

Interquartile Range	0	
Skewness	.670	.427
Kurtosis	1.132	.833

NORMALITY TEST

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Pre_Test	Kontrol	.473	30	.000	.526	30	.000
Post_Test	Kontrol	.441	30	.000	.619	30	.000

a. Lilliefors Significance Correction

Pre-Post Difference: Intervention and Control Groups

		Descriptives		
	kelompok		Statistic	Std. Error
Pre_Test	Intervensi	Mean	3.67	.088
		95% Confidence Interval for Lower Bound	3.49	
		Mean Upper Bound	3.85	
		5% Trimmed Mean	3.69	
		Median	4.00	
		Variance	.230	
		Std. Deviation	.479	
		Minimum	3	
		Maximum	4	
		Range	1	
		Interquartile Range	1	
		Skewness	-.745	.427
		Kurtosis	-1.554	.833
	Kontrol	Mean	3.77	.079
		95% Confidence Interval for Lower Bound	3.61	
		Mean Upper Bound	3.93	
		5% Trimmed Mean	3.80	
		Median	4.00	

		Variance	.185	
		Std. Deviation	.430	
		Minimum	3	
		Maximum	4	
		Range	1	
		Interquartile Range	0	
		Skewness	-1.328	.427
		Kurtosis	-.257	.833
Post_Test	Intervensi	Mean	4.43	.092
		95% Confidence Interval for Mean	Lower Bound	4.25
			Upper Bound	4.62
		5% Trimmed Mean	4.43	
		Median	4.00	
		Variance	.254	
		Std. Deviation	.504	
		Minimum	4	
		Maximum	5	
		Range	1	
		Interquartile Range	1	
		Skewness	.283	.427
		Kurtosis	-2.062	.833
	Kontrol	Mean	4.17	.084
		95% Confidence Interval for Mean	Lower Bound	3.99
			Upper Bound	4.34
		5% Trimmed Mean	4.17	
		Median	4.00	
		Variance	.213	
		Std. Deviation	.461	
		Minimum	3	
		Maximum	5	
		Range	2	
		Interquartile Range	0	
		Skewness	.670	.427
		Kurtosis	1.132	.833

Selisih	Intervensi	Mean	.77	.104
		95% Confidence Interval for Mean	Lower Bound	.55
			Upper Bound	.98
		5% Trimmed Mean		.74
		Median		1.00
		Variance		.323
		Std. Deviation		.568
		Minimum		0
		Maximum		2
		Range		2
		Interquartile Range		1
		Skewness	-.013	.427
		Kurtosis	-.168	.833
	Kontrol	Mean	.40	.103
		95% Confidence Interval for Mean	Lower Bound	.19
			Upper Bound	.61
		5% Trimmed Mean		.35
		Median		.00
		Variance		.317
		Std. Deviation		.563
		Minimum		0
		Maximum		2
		Range		2
		Interquartile Range		1
		Skewness	1.042	.427
		Kurtosis	.176	.833

Tests of Normality

	kelompok	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Pre_Test	Intervensi	.423	30	.000	.597	30	.000
	Kontrol	.473	30	.000	.526	30	.000
Post_Test	Intervensi	.372	30	.000	.632	30	.000
	Kontrol	.441	30	.000	.619	30	.000
Selisih	Intervensi	.359	30	.000	.735	30	.000
	Kontrol	.395	30	.000	.669	30	.000

a. Lilliefors Significance Correction

B. BIVARIATE TEST

Gender * Group Crosstabulation

Count

		Kelompok		Total
		intervensi	kontrol	
Jenis_kelamin	Laki-Laki	18	17	35
	Perempuan	12	13	25
Total		30	30	60

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,069 ^a	1	,793		
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,069	1	,793		
Fisher's Exact Test				1,000	,500
Linear-by-Linear Association	,067	1	,795		
N of Valid Cases	60				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 12,50.

b. Computed only for a 2x2 table

Education * Group Crosstabulation

Count

		Kelompok		Total
		intervensi	kontrol	
Pendidikan	SD	0	2	2
	SMP	11	12	23
	SMA	11	10	21
	PT	8	6	13
	42	1	0	1
Total		30	30	60

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	2,377 ^a	3	,498
Likelihood Ratio	3,150	3	,369
Linear-by-Linear Association	1,142	1	,258
N of Valid Cases	60		

a. 4 cells (40,0%) have expected count less than 5. The minimum expected count is ,50.

Type of Stroke * Group Crosstabulation

Count

		Kelompok		Total
		intervensi	kontrol	
Jenis_Stroke	Hemoragik	24	21	45
	Iskemik	6	9	15
Total		30	30	60

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	,800 ^a	1	,371		
Continuity Correction ^b	,356	1	,551		
Likelihood Ratio	,804	1	,370		
Fisher's Exact Test				,552	,276
Linear-by-Linear Association	,787	1	,375		
N of Valid Cases	60				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,50.

b. Computed only for a 2x2 table

Wilcoxon Signed Ranks Test Group of Intervention

Ranks

		N	Mean Rank	Sum of Ranks
Pre_Test - Post_Test	Negative Ranks	21 ^a	11.00	231.00
	Positive Ranks	0 ^b	.00	.00
	Ties	9 ^c		
	Total	30		

Test Statistics^a

	Post_Kekuatan_ Otot - Pre_Kekuatan_ Otot
Z	-4.413 ^b
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Wilcoxon Signed Ranks Test Group of Control

Ranks		N	Mean Rank	Sum of Ranks
Post_Kekuatan_Otot - Pre_Kekuatan_Otot	Negative Ranks	11 ^a	6.00	66.00
	Positive Ranks	0 ^b	.00	.00
	Ties	19 ^c		
	Total	30		

Test Statistics^a

Post_Kekuatan_ Otot - Pre_Kekuatan_ Otot	
Z	-3.207 ^b
Asymp. Sig. (2-tailed)	.001

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

EQUIVALENCY TEST Mann-Whitney Test

Ranks		N	Mean Rank	Sum of Ranks
Usia	intervensi	30	29,93	898,00
	kontrol	30	31,07	932,00
	Total	60		

Test Statistics^a

Usia	
Mann-Whitney U	433,000
Wilcoxon W	898,000
Z	-,252
Asymp. Sig. (2-tailed)	,801

a. Grouping Variable: Kelompok

PRE INTERVENTION Mann-Whitney Test

Ranks				
	Kelompok	N	Mean Rank	Sum of Ranks
Pre_Kekuatan_Otot	intervensi	30	29.00	870.00
	kontrol	30	32.00	960.00
	Total	60		

Test Statistics^a

	Pre_Kekuatan_Otot
Mann-Whitney U	405.000
Wilcoxon W	870.000
Z	-.852
Asymp. Sig. (2-tailed)	.394

a. Grouping Variable: Kelompok

POST INTERVENTION Man-Whitney Test

Ranks				
	Kelompok	N	Mean Rank	Sum of Ranks
Post_Kekuatan_Otot	intervensi	30	33,50	1005,00
	kontrol	30	27,50	825,00
	Total	60		

Test Statistics^a

	Post_Kekuatan_Otot
Mann-Whitney U	360,000
Wilcoxon W	825,000
Z	-1,629
Asymp. Sig. (2-tailed)	,003

a. Grouping Variable: Kelompok

The Effect of a Combination of Proprioceptive Neuromuscular Facilitation (PNF) and Handball Grasping on Upper Extremity Muscle Strength Improvement in Post-Stroke Patients

Ranks				
	kelompok	N	Mean Rank	Sum of Ranks
Selisih	Intervensi	30	35.52	1065.50
	Kontrol	30	25.48	764.50
	Total	60		

Test Statistics^a

	SELISIH_PRE_ POST_Kekuatan _Otot
Mann-Whitney U	299.500
Wilcoxon W	764.500
Z	-2.510
Asymp. Sig. (2-tailed)	.012

a. Grouping Variable: Kelompok

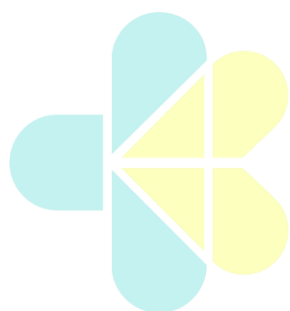


Attachment 3 Research Documentation – Intervention Group

Intervention Group







Kemenkes
Poltekkes Bengkulu

Attachment 4 Research Documentation – Control Group

Control Group





Kemenkes
Poltekkes Bengkulu

Attachment 5 Respondent Request Letter

RESPONDENT REQUEST LETTER

To

Prospective Respondents

Dear Sir/Madam,

I, The undersigned below:

Name : Sapna Triyaningsih

**College Student : Nursing Department, Applied Bachelor of Nursing and
Professional Nurse Program**

Address : Jl.Mangga V E, Kec. Singaran Pati, Bengkulu City

Phone Number: 089630634399

I am a student of the Bengkulu Health Polytechnic, Ministry of Health, currently conducting research. The purpose of this study is to determine the effect of the combination of Proprioceptive Neuromuscular Facilitation (PNF) and Hand Ball Grasping on increasing upper extremity muscle strength in post-stroke patients in the working area of Sawah Lebar Community Health Center, Bengkulu City. I will provide this consent form and explain that your participation in this study is entirely voluntary.

In this study, I will maintain the confidentiality of the respondents. Patients' names will not be recorded anywhere. Participation in this study may provide direct benefits to respondents, and the results may increase respondents' knowledge regarding the effect of the combination of Proprioceptive Neuromuscular Facilitation (PNF) and Hand Ball Grasping on increasing upper extremity muscle strength. If, after participating in this study, you still have questions, you may contact me at the telephone number above.

If you agree, I kindly ask you to sign the consent form as a research respondent. Thank you for your attention, cooperation, and willingness to participate.

Respectfully,

Sapna Triyaningsih

*Attachment 6 Informed Consent and Research Explanation***INFORMED CONSENT AND RESEARCH EXPLANATION****To****Prospective Respondents**

Dear Sir/Madam,

I, The undersigned below:

Name : Sapna Triyaningsih**College Student : Nursing Department, Applied Bachelor of Nursing and Professional Nurse Program****Address : Jl.Mangga V E, Kec. Singaran Pati, Bengkulu City****Phone Number: 089630634399**

I am a student of the Bengkulu Health Polytechnic, Ministry of Health, currently conducting research entitled “The Effect of the Combination of Proprioceptive Neuromuscular Facilitation (PNF) and Hand Ball Grasping on Increasing Upper Extremity Muscle Strength in Post-Stroke Patients in the Working Area of Sawah Lebar Community Health Center, Bengkulu City.” The purpose of this study is to increase knowledge regarding the management of balance exercises in post-stroke patients to reduce the risk of falls.

In this study, respondents will be provided with an observation sheet to assess the improvement of upper extremity muscle strength in patients with muscle weakness. This study will not cause harm or danger to respondents, although mild effects such as fatigue may occur. If you participate as a respondent and experience any discomfort or other concerns, you may report them to the researcher or withdraw from the study at any time by contacting the researcher at the telephone number listed above. Respondents will receive compensation for the time spent completing the observation sheet, as determined by the researcher.

The confidentiality of all information provided will be maintained and used only for research purposes. All records or respondent data will be stored at the Bengkulu Health Polytechnic, Ministry of Health. After reading the information and understanding the purpose of the study and the role expected of you, please sign the consent form to participate as a respondent in this study.

Attachment 7 Respondent Consent Letter

RESPONDENT CONSENT LETTER

I, The undersigned below

Name :

Age :

Gender :

Address :

Hereby agree to participate as a respondent in the research conducted by Ms. Sapna Triyaningsih, a student of the Applied Bachelor of Nursing Program at the Bengkulu Health Polytechnic, Ministry of Health, entitled “The Effect of the Combination of Proprioceptive Neuromuscular Facilitation (PNF) and Hand Ball Grasping on Increasing Upper Extremity Muscle Strength in Post-Stroke Patients in the Working Area of Sawah Lebar Community Health Center, Bengkulu City, in 2026.”

This research will not cause harm to me or have adverse consequences for me or my family. Therefore, I am willing to participate as a respondent. I hereby make this consent form to be used as appropriate.

Bengkulu.....2026

Respondent Researcher

Attachment 8 Respondent Demographic Data Collection Instrument

RESPONDENT DEMOGRAPHIC DATA COLLECTION INSTRUMENT

- No Responden** :
1. Respondent's Name (initials) :
 2. Gender : ☐ Male
☐ Female
 3. Age : Year
 4. Education : ☐ Elementary School
☐ Junior High School
☐ Senior High School
☐ Higher Education
 - 5.. Type of Stroke : ☐ Stroke Hemoragik
☐ Stroke Non Hemoragik
 6. History of Comorbid Diseases : ☐ Yes
(Hypertension, Diabetes Mellitus) ☐ No

Attachment 9 Manual Muscle Testing (MMT) Instrument Format

MANUAL MUSCLE TESTING (MMT) INSTRUMENT FORMAT

Name :
Age :
Gender :
Address :

Instructions:

- 1) Measure muscle strength by instructing the respondent to move the arm (muscle strength test).
- 2) Assess the result according to the 0–5 muscle strength scale.

CATEGORY	SCORE	DESCRIPTION
Normal	5	Able to move against gravity and maximum resistance.
Good	4	Able to move against gravity and moderate resistance.
Fair	3	Able to move against gravity but unable to withstand minimal resistance.
Poor	2	Able to perform movement, but the joint cannot move against gravity.
Trace	1	Muscle contraction or tone is present, but there is no movement.
Zero	0	No muscle tone is present.

Source: (Hermawan and Wihardja, 2020)

Attachment 10 SOP for Proprioceptive Neuromuscular Facilitation (PNF)

**STANDAR OPERASIONAL PROSEDUR
PROPIOCEPTIVE NEUROMUSCULAR FACILITATION (PNF)**

	STANDAR OPERASIONAL PROSEDUR (SOP) PROPIOCEPTIVE NEUROMUSCULAR FACILITATION (PNF)
Definition	Proprioceptive Neuromuscular Facilitation (PNF) is a therapeutic exercise method that utilizes proprioceptive impulses to facilitate movement by reactivating latent mechanisms and the body's reserve potential, thereby producing normal and coordinated functional movements.
Objectives	1. To provide appropriate stimuli corresponding to the desired response. 2. To achieve coordinated abilities or movements. 3. To reactivate existing body mechanisms and reserves in order to improve functional ability.
Preparation of Equipment/Materials and Exercise Requirements	1. A stable chair or seat and a table. 2. Muscle strength measurement sheet (MMT). 3. A small pillow to support the arm during exercise. 4. A notebook or observation sheet to record exercise progress.
Place Preparation	May be performed at home or adjusted to the client's comfort
Client Preparation	1. Greet the client and introduce yourself. 2. Identify the client's identity. 3. Explain the purpose and benefits of the intervention. 4. Explain the duration of the intervention. 5. Arrange the place and ensure the client's comfort and positioning

Procedure	1. Ensure that the patient sits upright in a chair with both feet flat on the floor. Ask the patient to clasp both hands so that the stronger hand can control and guide the weaker hand. 2. Instruct the patient to raise both shoulders simultaneously. The stronger hand assists the weaker shoulder in moving upward. After reaching a comfortable limit, the patient slowly lowers the shoulders. 3. Ask the patient to raise both arms forward as high as possible, with the healthy hand ensuring that the weak hand follows the same path. After reaching the top, slowly lower the arms. 2. Ask the patient to move both arms sideways until they are widely opened, then return them to the center. The stronger hand assists the weak arm so that it does not fall. 3. Ask the patient to bend both elbows toward the chest and then straighten them again. Perform the movement slowly so that the weak arm remains controlled. 4. Keep both hands clasped. Ask the patient to rotate the forearms so that the palms face upward, then rotate them back downward. The healthy hand guides the weak arm so that it remains stable. 5. Ask the patient to raise both hands from the waist toward the upper diagonal, as if pulling a belt toward the opposite shoulder. The healthy hand guides the weak arm. 6. From the upper diagonal position, ask the patient to lower both hands toward the outer waist, as if putting an object into a pocket. 7. Ask the patient to open both arms diagonally upward and sideways, as if lifting a sword. The healthy arm guides the weak arm. 8. From the upper-side position, ask the patient to lower both hands diagonally across toward the opposite waist.
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	9. Instruct the patient to place the hands on the table. The healthy hand helps move the thumb of the weak hand to touch the tips of the index, middle, ring, and little fingers. Hold each touch for 2–3 seconds to improve fine motor skills. 10. Instruct the patient to bring the fingertips of the healthy hand to the fingers of the weak hand one by one, starting with the thumb, index finger, middle finger, ring finger, and little finger. The healthy hand guides the weak fingers so that they remain stable and make accurate contact.
Termination and Evaluation	1. Organize and tidy the equipment and materials. 2. Evaluate the patient after PNF therapy and establish a follow-up plan. 3. Document the activity results

Source: (Wahyudin *et al.*, 2022) (Syokuawena *et al.*, 2024)

HAND BALL GRASPING

	STANDAR OPERASIONAL PROSEDUR (SOP) <i>HAND BALL GRASPING EXERCISE</i>
Definition	Hand Ball Grasping is an exercise method performed through repeated gripping and releasing of a ball to train contraction and relaxation of the hand muscles.
Objective	The objective of Hand Ball Grasping is to stimulate the neuromuscular system, increase muscle strength, and improve fine motor control impaired by reduced motor nerve function.
Preparation of Equipment/Materials and Exercise Requirements	1. Stable chair or seat. 2. Support. 3. Rubber ball. 4. Hand towel or hand mat. 5. Muscle strength measurement sheet (MMT). 6. Stopwatch. 7. Exercise for 15 minutes, 3 times a week
Place Preparation	May be performed at home or adjusted to the client's comfort
Client Preparation	1. Greet the client and introduce yourself. 2. Identify the client's identity. 3. Explain the purpose and benefits of the intervention. 4. Explain the duration of the intervention. 5. Arrange the place and ensure the client's comfort and positioning
Procedure	1. Assist the patient with a warm-up by moving the elbow toward the upper arm (flexion) and then straightening the upper arm (extension) on both sides.

2. Place the rubber ball on the palm of the patient's weak hand.

3. Instruct and assist the patient to grip or squeeze the rubber ball using the following movements:

a. First movement: *Ball grip (wrist up)*

Hold the ball in the palm. Open the hand so that the palm faces upward. Grip the ball firmly in the palm, hold, and relax. Repeat.



BALL GRIP (WRIST UP)

b. Second movement *Ball grip (wrist down)*

Hold the ball in the palm. Turn the hand so that the palm faces downward. Squeeze the ball in the palm. Hold and relax. Repeat.



BALL GRIP (WRIST DOWN)

c. Third movement *Pinch*

Place the ball between the thumb and index finger. Squeeze them together. Hold and relax.



PINCH

d. Fourth movement *Thumb extend*

Place the ball between the bent thumb and two fingers of the same hand. Roll the ball

while extending and straightening the thumb.



THUMB EXTEND

e. Fifth Movement *Opposition*

Place the ball in the palm. Hold it between the thumb and fingers while exercising. Bring the thumb and fingers together. Hold and relax the hand.



OPPOSITION

f. Sixth Movement *Extend out*

Place the ball on a table. Place the fingertips on the ball. Roll the ball outward across the table.



EXTEND OUT

g. Seventh Movement *Side-Squeeze*

Place the ball between any two fingers. Bring the two fingers together. Hold and relax.

	 SIDE SQUEEZE h. Eighth Movement <i>Finger bend</i> Place the ball in the palm with the fingers pressing into the ball. Push the fingers into the ball while bending them. Hold and then relax.  FINGER BEND 1. Ask the patient to repeat the movements continuously for one to two minutes for each movement. 2. After completion, instruct the patient to release the grip or squeeze on the rubber ball.
Termination and Evaluation	1. Organize and tidy the equipment and materials. 2. Evaluate the patient after Hand Ball Grasping therapy and establish a follow-up plan. 3. Document the activity results

Source: (Rahmawati *et al.*, 2021) (Yani & Anggaini, 2025).

Attachment 12 Standard Operating Procedure for Dumbbell Exercise

STANDAR OPERASIONAL PROSEDUR
DUMBBELL EXERCISE

	STANDAR OPERASIONAL PROSEDUR <i>DUMBBELL EXERCISE</i>
Definition	Dumbbell Exercise is a progressive strength exercise using dumbbells as resistance equipment to stimulate muscle contraction, particularly in the arm and shoulder muscles. The exercise follows the principle of gradually increasing the load according to individual ability to promote muscular adaptation
Objective	The objective of Dumbbell Exercise is to help strengthen muscles, improve endurance, improve muscle tone, and support joint coordination and stability.
Preparation of Equipment/Materials and Exercise Requirements	1. Dumbbell (0.5 kg). 2. Muscle strength measurement sheet (MMT). 3. Notebook or observation sheet to record exercise progress. 4. Stopwatch. 5. Exercise for 15 minutes, 3 times a week
Place Preparation	May be performed at home or adjusted to the client's comfort
Client Preparation	1. Greet the client and introduce yourself. 2. Identify the client's identity.

	3. Explain the purpose and benefits of the intervention. 4. Explain the duration of the intervention. 5. Arrange the place and ensure the client's comfort and positioning
Procedure	1. Position the patient sitting comfortably and relaxed. 2. Raise the dumbbell above the head and then lower it. Perform three repetitions. 3. Hold the dumbbell in the hand. Keep the patient's arm straight, raise the arm sideways to shoulder height, and then lower it. Perform three repetitions. 4. Lean the body slightly forward, keep the elbow behind the body, straighten the elbow while lifting the weight backward, then bend the elbow. Ensure that the elbow remains behind the body and only the lower arm moves from the elbow. Perform three repetitions. 5. Hold the weight in the hand, bend the elbow, and then straighten the elbow. Perform three repetitions or perform the movement with both elbows simultaneously. 6. Push the arms upward and return them downward while both hands hold the dumbbells. 7. Allow the patient time to rest
Termination and Evaluation	1. Organize and tidy the equipment and materials. 2. Evaluate the patient after therapy and establish a follow-up plan. 3. Document the activity results

Source: (Hidayat & Munandar, 2022)

Attachment 13 Standard Operating Procedure for Manual Muscle Testing

STANDAR OPERASIONAL PROSEDUR
MANUAL MUSCLE TESTING

	STANDAR OPERASIONAL PROSEDUR MANUAL MUSCLE TESTING
Definition	Manual Muscle Testing (MMT) is an examination used to determine a person's muscle strength when consciously contracting part of a muscle or a muscle group
Objective	The objective of Manual Muscle Testing (MMT) is to determine muscle strength, identify specific areas of weakness, provide a basis for developing rehabilitative interventions, and monitor changes in muscle strength periodically
Preparation of Equipment/Materials and Exercise Requirements	a. Muscle strength measurement sheet (MMT). b. Notebook or observation sheet for recording the client's muscle strength score.
Place Preparation	May be performed at home or adjusted to the client's comfort
Client Preparation	The client should wear clothing that: 1. Does not restrict movement, such as clothing that is too tight or too loose.

	2. Provides adequate ventilation.
Procedure	1. Greet the client and introduce yourself. 2. Identify the client's identity. 3. Explain the purpose and benefits of the procedure. 4. Prepare the MMT muscle strength measurement sheet. 5. Instruct the client to raise the arm. 6. Ask the client to perform flexion of the arm, elbow, and wrist of the upper limb and apply resistance. 7. Ask the client to perform extension of the arm, elbow, and wrist of the upper limb and apply resistance. 8. Apply resistance for 5 seconds. 9. Assess muscle strength using the 0–5 scale
Termination and Evaluation	1. Organize and tidy the equipment and materials. 2. Evaluate the patient after the muscle strength assessment and establish a follow-up plan. 3. Document the activity results.

Source: (Hermawan and Wihardja, 2020)

Attachment 14 Pre-Research Permit Letter

 Kemenkes Poltekkes Bengkulu	Kementerian Kesehatan Direktorat Jenderal Sumber Daya Manusia Kesehatan Politeknik Kesehatan Bengkulu Jalan Indragiri No.3 Padang Harapan Bengkulu 38225 (0736) 341212 https://www.poltekkesbengkulu.ac.id
Nomor : PP.06.02/F.XXIII.1/§198 /2025 Penihal : Izin Pra Penelitian	21 November 2025
Yth. Kepala Puskesmas Sawah Lebar Kota Bengkulu di Tempat	
Sehubungan penyusunan tugas akhir dalam bentuk Skripsi Mahasiswa Program Studi Keperawatan Program Sarjana Terapan Jurusan Keperawatan Politeknik Kesehatan Kemenkes Bengkulu Tahun Akademik 2025/2026, dengan ini mohon Bapak/Ibu dapat memberikan izin pengambilan data, Pra Penelitian pada mahasiswa dibawah ini :	
Nama Mahasiswa : Sapna Triyaningsih	
Nim : P01720322091	
Tempat : Puskesmas Sawah Lebar	
Judul : Pengaruh Kombinasi Proprioceptive Neuromuscular Facilitation (PNF) Dan Hand Ball Grasping Terhadap Peningkatan Kekuatan Otot Ekstrimitas Atas Pada Pasien Pasca Stroke	
No Handphone : 089630634399	
Demikianlah, atas perhatian dan kerjasamanya kami mengucapkan terimakasih.	
 Wakil Direktur I Bidang Akademik Septiyanti, S.Kep, Ners, M.Pd	

Attachment 15 Pre-Research Letter, Bengkulu City Health Office



**PEMERINTAH KOTA BENGKULU
DINAS KESEHATAN**

Jl. Letjen Basuki Rahmat No. 8 Kel. Belakang Pondok Kec. Ratu Samban
Kota Bengkulu Telp. 085216000810 Email dinkeskotabengkulu1@gmail.com.
www.dinkes.bengkulukota.go.id Kode Pos 34223

REKOMENDASI

Nomor : 000.9.2/1732 /D.Kes/2025

Dasar Surat Wakil Direktur I Bidang Akademik Poltekkes Kemenkes Bengkulu Nomor: PP.06.02/F.XXIII.1/6325/2025 Tanggal 08 Agustus 2025 Perihal : Permohonan Izin Pengambilan data untuk penyusunan tugas akhir proposal skripsi atas nama

Nama : Sapna Triyaningsih
NPM : P01720322091
Program Studi : Keperawatan
Judul/Data : Pengaruh kombinasi active cylindrical grip exercise dan hand ball grasping exercise terhadap peningkatan kekuatan otot pada pasien stroke
Tempat penelitian : 1. Dinas Kesehatan Kota Bengkulu
 2. Puskesmas ...
Lama Kegiatan : 14 Agustus 2025 s/d. 25 Agustus 2025

Pada prinsipnya Dinas Kesehatan Kota Bengkulu tidak berkeberatan diadakan pra penelitian/kegiatan yang dimaksud dengan catatan ketentuan :

- Tidak dibenarkan mengadakan kegiatan yang tidak sesuai dengan penelitian yang dimaksud.
- Harap mentaati semua ketentuan yang berlaku serta mengindahkan adat istiadat setempat.
- Apabila masa berlaku Rekomendasi Pra Penelitian ini sudah berakhir, sedangkan pelaksanaan belum selesai maka yang bersangkutan harus mengajukan surat perpanjangan Rekomendasi Pra Penelitian.
- Setelah selesai mengadakan kegiatan diatas agar melapor kepada Kepala Dinas Kesehatan Kota Bengkulu (tembusan).
- Surat Rekomendasi Pra Penelitian ini akan dicabut kembali dan dinyatakan tidak berlaku apabila ternyata pemegang surat ini tidak mentaati ketentuan seperti tersebut diatas.

Demikianlah Rekomendasi ini dikeluarkan untuk dapat dipergunakan sebagaimana mestinya.

Bengkulu, Agustus 2025

Kepala Dinas Kesehatan
Kota Bengkulu



Joni Haryadi Thabrani, SKM, MM
 Pembina Tk.I - IV/b
 NIP.197406081994021002

Tembusan :
 1. Yth. Sdr. Ka. UPTD Puskesmas ...
 2. Yang Bersangkutan

Attachment 16 Research Permit Cover Letter, Kesbangpol Bengkulu City



Kementerian Kesehatan
Direktorat Jenderal
Sumber Daya Manusia Kesehatan

Politeknik Kesehatan Bengkulu

Jalan Indragiri No.3 Padang Harapan

Bengkulu 38225

(0736) 341212

<https://www.poltekkesbengkulu.ac.id>

27 Januari 2026

Nomor : PP. 01.01/F.XXIII.1/1083/2026
 Perihal : Izin Penelitian

Yth,
Kepala Badan Kesatuan Bangsa dan Politik Kota Bengkulu
 di
Tempat

Sehubungan penyusunan tugas akhir mahasiswa dalam bentuk Skripsi Program Studi Keperawatan Program Sarjana Terapan Jurusan Keperawatan Politeknik Kesehatan Kemenkes Bengkulu Tahun Akademik 2025/2026, dengan ini kami mohon Bapak/Ibu dapat memberikan izin pengambilan data untuk penelitian kepada:

Nama : Sapna Triyaningsih
 NIM : P01720322091
 Tempat Penelitian : Puskesmas Sawah Lebar Kota Bengkulu
 Waktu Penelitian : 1 februari - 1 april
 Judul : PENGARUH KOMBINASI PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION (PNF) DAN HAND BALL GRASPING TERHADAP PENINGKATAN KEKUATAN OTOT EKSTREMITAS ATAS PADA PASIEN PASCA STROKE DI WILAYAH KERJA PUSKESMAS SAWAH LEBAR KOTA BENGKULU TAHUN 2026
 No Handphone : 089630634399

Demikianlah, atas perhatian dan kesediaan Bapak/Ibu diucapkan terimakasih.

a.n. Direktur Poltekkes Kemenkes Bengkulu

Wakil Direktur Bidang Akademik



Septiyanti, S.Kep, Ners, M.Pd

Attachment 17 Recommendation Letter, Kesbangpol Bengkulu City



PEMERINTAH KOTA BENGKULU
BADAN KESATUAN BANGSA DAN POLITIK

Alamat : Jl. Melur No.1 Kelurahan Nusa Indah
 Email : bkesbangpolkotabengkulu@gmail.com

REKOMENDASI PENELITIAN

Nomor : 000.9.2/307/KESBANGPOL-REK/2026

- Dasar** : Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 7 Tahun 2014 tentang Perubahan Atas Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 64 Tahun 2011 tentang Pedoman Penerbitan Rekomendasi Penelitian
- Memperhatikan** : Surat dari Wakil Direktur I Bidang Akademik Poltekkes Kemenkes Bengkulu Nomor : PP.01.01/F.XXIII.1/1083/2026 Tanggal 27 Januari 2026 perihal Izin Penelitian

DENGAN INI MENYATAKAN BAHWA

Nama : Sapna Triyaningsih
 NIM : P01720322091
 Pekerjaan : Mahasiswa/i
 Prodi/ Fakultas : Sarjana Terapan Keperawatan
 Judul Penelitian : Pengaruh Kombinasi Proprioceptive Neuromuscular Facilitation (Pnf) Dan Hand Ball Grasping Terhadap Peningkatan Kekuatan Otot Ekstremitas Atas Pada Pasien Pasca Stroke Di Wilayah Kerja Puskesmas Sawah Lebar Kota Bengkulu Tahun 2026

Tempat Penelitian : Puskesmas Sawah Lebar Kota Bengkulu
 Waktu Penelitian : 01 Februari 2026 s.d 01 April 2026
 Penanggung Jawab : Wakil Direktur I Bidang Akademik Poltekkes Kemenkes Bengkulu

- Dengan Ketentuan** :
- 1 Tidak dibenarkan mengadakan kegiatan yang tidak sesuai dengan penelitian yang dimaksud.
 - 2 Harus mentaati peraturan perundang-undangan yang berlaku serta mengindahkan adat istiadat setempat.
 - 3 Apabila masa berlaku Rekomendasi Penelitian ini sudah berakhir, sedangkan pelaksanaan belum selesai maka yang bersangkutan harus mengajukan surat perpanjangan Rekomendasi Penelitian.
 - 4 Surat Rekomendasi Penelitian ini akan dicabut kembali dan dinyatakan tidak berlaku apabila ternyata pemegang surat ini tidak mentaati ketentuan seperti tersebut diatas.

Demikianlah Rekomendasi Penelitian ini dikeluarkan untuk dapat dipergunakan sebagaimana mestinya.

Bengkulu, 2 Februari 2026

a.n. WALI KOTA BENGKULU

Kepala Badan Kesatuan Bangsa dan Politik Kota Bengkulu,



Syofyan Tosoni, SE, MM
 Pembina Utama Muda (IVc)
 NIP. 197009021993031006

Attachment 18 Research Permit Cover Letter, Bengkulu City Health Office



**Kementerian Kesehatan
Direktorat Jenderal
Sumber Daya Manusia Kesehatan**

Politeknik Kesehatan Bengkulu

Jalan Indragiri No.3 Padang Harapan

Bengkulu 38225

(0736) 341212

<https://www.poltekkesbengkulu.ac.id>

27 Januari 2026

Nomor : PP. 01.01/F.XXIII.1/10 14/2026
Penihal : Izin Penelitian

Yth,
Kepala Dinas Kesehatan Kota Bengkulu
di
Tempat

Sehubungan penyusunan tugas akhir mahasiswa dalam bentuk Skripsi Program Studi Keperawatan Program Sarjana Terapan Jurusan Keperawatan Politeknik Kesehatan Kemenkes Bengkulu Tahun Akademik 2025/2026, dengan ini kami mohon Bapak/Ibu dapat memberikan izin pengambilan data untuk penelitian kepada:

Nama : Sapna Triyaningsih
NIM : P01720322091
Tempat Penelitian : Puskesmas Sawah Lebar Kota Bengkulu
Waktu Penelitian : 1 februari - 1 april
Judul : PENGARUH KOMBINASI PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION (PNF) DAN HAND BALL GRASPING TERHADAP PENINGKATAN KEKUATAN OTOT EKSTREMITAS ATAS PADA PASIEN PASCA STROKE DI WILAYAH KERJA PUSKESMAS SAWAH LEBAR KOTA BENGKULU TAHUN 2026
No Handphone : 089630634399

Demikianlah, atas perhatian dan kesediaan Bapak/Ibu diucapkan terimakasih.

a.n. Direktur Poltekkes Kemenkes Bengkulu

Wakil Direktur I Bidang Akademik



Septiyanti, S.Kep, Ners, M.Pd

Attachment 19 Recommendation Letter, Bengkulu City Health Office



PEMERINTAH KOTA BENGKULU
DINAS KESEHATAN

Jl. Letjen Basuki Rahmat No. 8 Kel. Belakang Pondok Kec. Ratu Samban Kota Bengkulu Email
dinkeskotabengkulu1@gmail.com / www.dinkes.bengkulukota.go.id Kode Pos 34223

REKOMENDASI

Nomor : 000.9.2 / / D.Kes / 2026

Dasar Surat

1. Wakil Direktur Bidang Akademik Poltekkes Kemenkes Bengkulu Nomor : PP.01.01/F.XXIII.1/1083/2026 Tanggal 27 Januari 2026
2. Kepala Badan Kesatuan Bangsa dan Politik Bengkulu Nomor : 000.9.2/307/KESBANGPOL-REK/2026 Tanggal 02 Februari 2026, Perihal : Penelitian untuk penyusunan tugas akhir mahasiswa Atas nama :

Nama : Sapna Triyaningsih
NIM : P01720322091
Program Studi : Sarjana Terapan Keperawatan
Judul : Pengaruh Kombinasi Proprioceptive Neuromuscular Facilitation (PNF) Dan Hand Ball Grasping Terhadap Peningkatan Kekuatan Otot Ektremitas Atas Pada Pasien Pasca Stroke Di Wilayah Kerja Puskesmas Sawah Lebar Kota Bengkulu
Lokasi Penelitian : Puskesmas Sawah Lebar Kota Bengkulu
Lama Kegiatan : 01 Februari S/D 02 Maret 2026
No Hp / Email : 089630634399

Pada prinsipnya Dinas Kesehatan Kota Bengkulu tidak berkeberatan diadakan penelitian/kegiatan yang dimaksud dengan catatan ketentuan :

- a. Tidak dibenarkan mengadakan kegiatan yang tidak sesuai dengan penelitian yang dimaksud.
- b. Harap mentaati semua ketentuan yang berlaku serta mengindahkan adat istiadat setempat.
- c. Apabila masa berlaku Rekomendasi Penelitian ini sudah berakhir, sedangkan pelaksanaan belum selesai maka yang bersangkutan harus mengajukan surat perpanjangan Rekomendasi Penelitian.
- d. Setelah selesai mengadakan kegiatan diatas agar melapor kepada Kepala Dinas Kesehatan Kota Bengkulu (tembusan).
- e. Surat Rekomendasi Penelitian ini akan dicabut kembali dan dinyatakan tidak berlaku apabila ternyata pemegang surat ini tidak mentaati ketentuan seperti tersebut diatas.

Demikianlah Rekomendasi ini dikeluarkan untuk dapat dipergunakan sebagaimana mestinya.

Bengkulu, Februari 2026

Plt. Kepala Dinas Kesehatan
Kota Bengkulu


Nelli Hartati, SKM/MM
Pembina IV/a
Nip. 197204191991012001

Tembusan :

1. Yth.Sdr.Ka.UPTD Puskesmas Sawah Lebar Kota Bengkulu
2. Yang Bersangkutan

Attachment 20 Research Permit Cover Letter, Sawah Lebar Community Health Center



**Kementerian Kesehatan
Direktorat Jenderal
Sumber Daya Manusia Kesehatan**

Politeknik Kesehatan Bengkulu

Jalan Indragiri No.3 Padang Harapan

Bengkulu 38225

(0736) 341212

<https://www.poltekkesbengkulu.ac.id>

27 Januari 2026

Nomor : PP. 01.01/F.XXIII.1/ 1085 /2026

Perihal : Izin Penelitian

Yth,

Kepala Puskesmas Sawah Lebar Kota Bengkulu

di

Tempat

Sehubungan penyusunan tugas akhir mahasiswa dalam bentuk Skripsi Program Studi Keperawatan Program Sarjana Terapan Jurusan Keperawatan Politeknik Kesehatan Kemenkes Bengkulu Tahun Akademik 2025/2026 , dengan ini kami mohon Bapak/Ibu dapat memberikan izin pengambilan data untuk penelitian kepada:

Nama : Sapna Triyaningsih

NIM : P01720322091

Tempat Penelitian : Puskesmas Sawah Lebar Kota Bengkulu

Waktu Penelitian : 1 februari -1 april

Judul : PENGARUH KOMBINASI PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION (PNF) DAN HAND BALL GRASPING TERHADAP PENINGKATAN KEKUATAN OTOT EKSTREMITAS ATAS PADA PASIEN PASCA STROKE DI WILAYAH KERJA PUSKESMAS SAWAH LEBAR KOTA BENGKULU TAHUN 2026

No Handphone : 089630634399

Demikianlah, atas perhatian dan kesediaan Bapak/Ibu diucapkan terimakasih.

a.n. Direktur Poltekkes Kemenkes Bengkulu

Wakil Direktur I Bidang Akademik



Septiyanti, S.Kep, Ners, M.Pd

Attachment 21 Ethical Clearance Letter



PEMERINTAH KOTA BENGKULU
DINAS KESEHATAN
UPTD PUSKESMAS SAWAH LEBAR

Jl. Sepakat RT 18 Kelurahan Sawah Lebar Baru Telp. (0736) 28360
 Email : pkmsawahlebar@gmail.com



LEMBAR DISPOSISI

Surat dari : Dinko Kota	Diterima Tgl : 07 Februari
No. Surat : 000.9.4/281/D.Ko/2016	No. Agenda :
Tgl. Surat :	Sifat : ☐ Sangat segera ☒ Segera ☐ Rahasia
Perihal : Rekomendasi izin penelitian Al-Safra Triyangdih Maket P. HUKO Keme-Ko	
Diteruskan kepada sdr : ☒ Dr. Muh. Fauzi, Pa. Sup. ☐ ☐	Dengan hormat harap : ☐ Tanggapan dan saran ☐ Proses lebih lanjut ☐ Koordinasi / Konfirmasi ☐
Dan seterusnya	
Catatan : Diberikan izin under proses penelitian di wilayah Pkm. Sawah Lebar	Kepala UPTD Puskesmas Sawah Lebar Kota Bengkulu dr. Fatimah, ST NIP.197309162008032001

Attachment 22 Research Completion Letter



Kementerian Kesehatan
Poltekkes Bengkulu

📍 Jalan Indragiri No. 3 Padang Harapan
Bengkulu 38225
☎ (0736) 341212
🌐 <https://poltekkesbengkulu.ac.id>

KETERANGAN LAYAK ETIK
DESCRIPTION OF ETHICAL EXEMPTION
"ETHICAL EXEMPTION"

No.KEPK.BKL/097/01/2026

Protokol penelitian versi 1 yang diusulkan oleh :
The research protocol proposed by

Peneliti utama : SAPNA TRIYANINGSIH
Principal In Investigator

Nama Institusi : Poltekkes Kemenkes Bengkulu
Name of the Institution

Dengan judul:
Title

"PENGARUH KOMBINASI PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION (PNF) DAN HAND BALL GRASPING TERHADAP PENINGKATAN KEKUATAN OTOT EKSTREMITAS ATAS PADA PASIEN PASCA STROKE DI WILAYAH KERJA PUSKESMAS SAWAH LEBAR KOTA BENGKULU TAHUN 2026"

"THE EFFECT OF A COMBINATION OF PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION (PNF) AND HANDBALL GRASPING ON INCREASING UPPER EXTREMITY MUSCLE STRENGTH IN POST-STROKE PATIENTS IN THE WORK AREA OF THE SAWAH LEBAR COMMUNITY HEALTH CENTER, BENGKULU CITY, IN 2026"

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 indikator 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/Exploitation, 6) Confidentiality and Privacy, and 7) Informed Consent, referring to the 2016 CIOMS Guidelines. This is as indicated by the fulfillment of the indicators of each standard.

Pernyataan Laik Etik ini berlaku selama kurun waktu tanggal 25 Januari 2026 sampai dengan tanggal 25 Januari 2027.

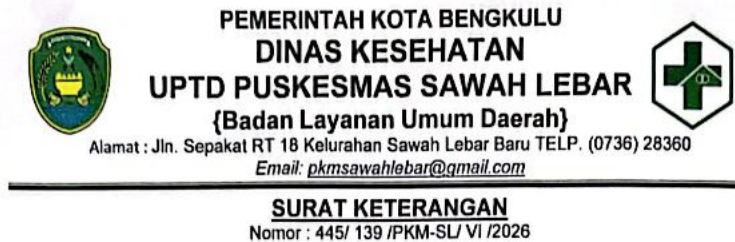
This declaration of ethics applies during the period January 25, 2026 until January 25, 2027.



January 25, 2026
Chairperson,

apt. Zamharira Muslim, M.Farm

Attachment 23 Thesis Consultation Sheet – Supervisor I



Berdasarkan surat rekomendasi dari Dinas Kesehatan Kota Bengkulu Nomor: 000.9.2/281/D.Kes/V/2026 tanggal februari 2026 tentang: Rekomendasi izin penelitian

Yang bertanda tangan dibawah ini Plt. Kepala UPTD Puskesmas Sawah Lebar Kota Bengkulu :

Nama : Erna Yulista,S.Tr.Keb
 N I P : 198802152011012001
 Pangkat/Gol. : Penata / III c
 Jabatan : Plt. Kepala UPTD Puskesmas Sawah Lebar Kota Bengkulu

Dengan ini menerangkan :

Nama : Sapna Triyaningsih
 NPM/ NIM : P01720322091
 Program Studi : Sarjana Terapan-Keperawatan

Benar telah melaksanakan penelitian di UPTD Puskesmas Sawah Lebar Kota Bengkulu dari tanggal 01 Februari s/d 01 April 2026, dengan judul "Pengaruh Kombinasi Proprioceptive Neuromuscular Facilitation (PNF) Dan Hand Ball Gasping Terhadap Peningkatan Kekuatan Otot Ekstremitas Atas Pada Pasien Pasca Stroke Di Wilayah Kerja Puskesmas Sawah Lebar Kota Bengkulu ".

Demikianlah keterangan ini dibuat untuk dapat dipergunakan sebagai mana mestinya..

Dikeluarkan di : Bengkulu
 Pada Tanggal : 03 Juni 2026
 Plt.Kepala UPTD Puskesmas Sawah Lebar
 Kota Bengkulu

 Erna Yulista,S.Tr.Keb
 NIP : 198802152011012001

Tembusan :

3. Dinas Kesehatan Kota Bengkulu
4. Arsip

Attachment 24 Thesis Consultation Sheet – Supervisor II

LEMBAR BIMBINGAN SKRIPSI

Pembimbing I : Ns. Hendri Heriyanto, S.Kep., M.Kep.

Mahasiswa : Sapna Triyaningsih

NIM : P01720322091

Judul Skripsi : Pengaruh Kombinasi Proprioceptive Neuromuscular Facilitation (PNF) dan Hand Ball Grasping Terhadap Peningkatan Kekuatan Otot Ekstremitas Atas Pada Pasca Stroke di Wilayah Kerja Puskesmas Sawah Lebar Kota Bengkulu Tahun 2026

No	Hari/Tanggal	Topik	Saran	Paraf Pembimbing
1.	Kamis, 18 September 2025	Konsul Judul	1. Cari masalah terkait penelitian yang diminati 2. Alasan mengenai pengambilan judul	Hendri
2.	Senin, 22 September 2025	Konsul Judul	1. Ace judul 2. Perbanyak referensi terkait judul 3. Lakukan studi lapangan 4. Lanjut ke BAB I	Hendri
3.	Senin, 27 Oktober 2025	Konsul BAB I,II,II	1. Perbaiki isi BAB I 2. Perbaiki penulisan 3. Perbaiki sumber materi	Hendri
4.	Senin, 3 November 2025	Konsul perbaikan BAB I,II,II	1. Tambahkan materi di BAB II 2. Tambahkan jurnal yang mendukung di BAB II 3. Perbaiki definisi operasional 4. Sistematis penulisan 5. Perbaiki daftar pustaka 6. Tambahkan sumber di instrumen penelitian	Hendri
5.	Rabu, 20 November 2025	Konsul perbaikan BAB I,II,II, dan IV	1. Perbaiki penulisan 2. Perbaiki teknik pengambilan sampel 3. Perbaiki BAB IV dibagian data primer	Hendri

6.	Kamis, 21 November 2025	Konsul perbaikan BAB I,II,II, dan IV	1. ACC Proposal dan lanjut ujian proposal	Hendish
7.	Rabu, 15 April 2026	Konsul BAB V	1. Perbaiki kalimat dengan menghapus kalimat yang berulang 2. Perbaiki penulisan pertemuan menjadi penelitian 3. Buat lebih lengkap lagi tentang alur penelitian	Hendish
8.	Kamis, 16 April 2026	Konsul perbaikan alur penelitian dan interpretasi hasil bab v	1. Perbaikam kalimat dan penulisan kata di alur penelitian 2. Perbaiki intepretasi di perbedaan rata rata dan gmbaaran score rata-rata 3. Alur penelitian buat lebih lengkap	Hendish
9.	Jum'at, 17 April 2026	Konsul BAB IV	1. Perbaikan hasil penelitian dengan mempertegas penulisan 2. Tambahkan jurnal di bab IV 3. Perbaikan dengan membuat hasil penelitian sejalan kemudian dilanjutkan teori 4. Di gambaran score rata rata <i>xerosis cutis</i> tambahkan selish rata rata.	Hendish
10.	Senin, 20 April 2026	Konsul keterbatasan penelitian	1. Tambahkan keterbatasan waktu di keterbatasan penelitian 2. Ganti keterbatasan penelitian yang desain penelitian 3. Tambahkan keterbatasan penelitian variabel perancu	Hendish

Lampiran 1 Lembar Konsul Skripsi Pembimbing II

LEMBAR BIMBINGAN SKRIPSI

Pembimbing II : Ns. Sahran, S.Kep., M.Kep.
Mahasiswa : Sapna Triyaningsih
NIM : P01720322091
Judul Skripsi : Pengaruh Kombinasi *Proprioceptive Neuromuscular Facilitation (PNF)* dan *Hand Ball Grasping* Terhadap Peningkatan Kekuatan Otot Ekstremitas Atas Pada Pasca Stroke di Wilayah Kerja Puskesmas Sawah Lebar Kota Bengkulu Tahun 2026

No	Hari/Tanggal	Topik	Saran	Paraf Pembimbing
1.	Rabu, 31 Juli 2025	Konsul judul	1. Cari masalah terkait penelitian yang diminati alasan mengenai pengambilan judul	
2.	Rabu, 5 November 2025	Konsul judul	1. Perbaiki isi BAB 2. Perbaiki definisi operasional	
3.	Rabu, 12 November 2025	Konsul BAB II, III	1. Perbaiki isi BAB I 2. Perbaiki penulisan instrumen MMT 3. Perbaiki definisi operasional 4. Perbaiki kriteria inklusi	
4.	Senin, 17 November 2025	Konsul perbaikan BAB I,II,III	1. Perbaiki penulisan 2. Lengkapi lampiran 3. Perbaiki bagian alur penelitian 4. Perbaiki bagian data inklusi dan eksklusi	
5.	Selasa, 25 November 2025	Konsul perbaikan BAB I,II,III, dan IV	1. Perbaiki kalimat dan penulisan 2. Lengkapi lampiran	
6.	Jumat, 28 November 2025	Konsul perbaikan BAB I,II,III, dan IV	1. ACC proposal dan lanjut ujian proposal	

7.	Senin/ 07 Mei 2026	Konsul alur penelitian	1. Tambahkan jumlah populasi untuk menentukan sampel di alur penelitian 2. Perbaiki kalimat dengan menghapus kalimat yang berulang 3. Perbaiki penulisan pertemuan menjadi penelitian 4. Menambahkan langkah pengolahan data yang di bab 4 ke alur penelitian	
8.	Selasa/ 25 Mei 2026	Konsul perbaikan alur penelitian dan interpretasi hasil bab v	1. Perbaikam kalimat dan penulisan kata di alur penelitian 2. Tambahkan penulisan penurunan di perbedaan rata rata 3. Perbaiki penulisan adanya pengaruh signifikan	
9.	Selasa/ 2 Juni 2026	Konsul bab vi	1. Perbaikan hasil penelitian dengan mempertegas penulisan 2. Perbaikan dengan membuat hasil penelitian sejalan kemudian dilanjutkan teori 3. Di gambaran <i>score</i> rata rata kekuatan otot tambahkan selish rata rata. 4. Di perbedaan rata-rata <i>score</i> kekuatan otot tambahkan perbedaan dan penjelasan kelebihan kelompok intervensi	