

BAB 6

KESIMPULAN DAN SARAN

6.1. Kesimpulan

Berdasarkan hasil analisis dan pembahasan yang telah dilakukan, maka dapat ditarik kesimpulan sebagai berikut:

1. Dari hasil pengamatan, wawancara, dan kuesioner diperoleh data bahwa tempat tidur periksa yang telah ada di BP.Panti Husada ternyata kurang ergonomis sehingga menimbulkan kesulitan dan ketidaknyamanan bagi pasien lansia yang menggunakannya. Desain tempat tidur periksa yang terlalu tinggi menyebabkan pasien lansia kesulitan untuk menaikinya, selain itu saat posisi duduk di tempat tidur periksa tersebut kaki pasien lansia juga terlalu menggantung. Dari data-data tersebut maka perlu dilakukan perancangan ulang terhadap tempat tidur periksa tersebut.
2. Dimensi dan ukuran tempat tidur periksa hasil rancangan serta spesifikasi bahan ditunjukkan pada tabel 5.25 berikut:

Tabel 5.25. Tabel Dimensi, Ukuran, dan Spesifikasi Tempat
Tidur Periksa Hasil Rancangan

| Dimensi | Ukuran | Spesifikasi bahan | |
|-----------------------------------|--------|----------------------------|---|
| a. Panjang <i>bed</i> atas | 125cm | Kayu bangkirai | Plitur warna <i>brown</i> merk 'KUPU' |
| b. Panjang <i>bed</i> bawah | 40cm | Kayu bangkirai | |
| c. Lebar tempat tidur periksa | 70cm | Kayu bangkirai | |
| d. Tinggi tempat tidur periksa | 70cm | Kayu bangkirai | |
| e. Lebar pijakan kaki | 30cm | Kayu bangkirai | |
| f. Tinggi pijakan kaki | 30cm | Kayu bangkirai | |
| g. Tinggi alat bantu | 135cm | Kayu bangkirai | |
| h. Diameter alat bantu | 3cm | Kayu bangkirai | |
| i. Tebal bantalan | 3,6cm | Busa sedang, kain oscar | Warna kain no.2022 |

3. Estimasi biaya yang harus dikeluarkan untuk membuat satu unit tempat tidur periksa adalah Rp 679.000,00/unit produk.

6.2. Saran

Penelitian selanjutnya dapat dilakukan dengan menganalisis dari segi biomekanika lansia sehingga dapat lebih meningkatkan tingkat keamanan produk hasil rancangan.

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Lampiran 1

KUISIONER

Saya adalah mahasiswa Universitas Atma Jaya Yogyakarta yang sedang melakukan Tugas Akhir dengan topik Usulan Perancangan Tempat Tidur Periksa yang ergonomis bagi pasien Lanjut usia. Untuk itu saya mengharapkan bantuan Saudara/Saudari untuk mengisi kuisisioner ini untuk kepentingan Tugas Akhir saya. Atas kesediannya saya ucapkan terima kasih.

Bagian 1

Petunjuk :

Berikan tanda *checkmark* (✓) pada kotak sesuai jawaban yang Anda berikan.

1. Apa jenis kelamin Anda?
 - Pria
 - Wanita

2. Berada dalam rentang berapa usia Anda saat ini?
 - 60 - 70 tahun
 - 71 - 80 tahun
 - 81 tahun ke atas

3. Seberapa seringkah anda menggunakan tempat tidur periksa di Balai Pengobatan Panti Husada?
 - Sering (lebih dari 4 kali dalam sebulan)
 - Kadang-kadang (1 sampai 4 kali dalam sebulan)
 - Tidak pernah

Bila jawaban Anda pada no. 4 adalah Anda sering atau kadang-kadang menggunakan tempat tidur periksa, maka dilanjutkan ke pertanyaan 5. Bila jawaban Anda tidak pernah Anda cukup menjawab sampai pertanyaan no.4 ini.

4. Apakah Anda mengalami kesulitan dalam proses menggunakan tempat tidur periksa?

- Ya
- Tidak

Bila jawaban Anda pada no. 5 adalah Anda merasa kesulitan, maka dilanjutkan ke pertanyaan 6. Bila jawaban Anda tidak, maka dilanjutkan ke pertanyaan no.7

5. Kesulitan seperti apa yang **paling** Anda rasakan saat menggunakan tempat tidur periksa?

- Sulit saat akan menaikinya (dari posisi berdiri ke posisi duduk)
- Sulit saat akan bangun (dari posisi berbaring ke posisi duduk)
- Sulit saat akan menuruninya (dari posisi duduk ke posisi berdiri kembali)

6. Apakah Anda merasa nyaman dengan tempat tidur periksa yang ada saat ini?

- Ya, saya merasa nyaman
- Tidak, saya merasa tidak nyaman

Bila jawaban Anda pada no. 7 adalah tidak nyaman, maka dilanjutkan ke pertanyaan 8.

7. Bagian ~~tubuh~~ manakah yang terasa **paling** tidak nyaman ketika menggunakan tempat tidur periksa tersebut?

Pinggang

Punggung

Kaki

Lainnya.....



Bagian 2

Preferensi Responden

Petunjuk :

Berikan penilaian terhadap kriteria-kriteria berikut ini dengan memberi tanda *checkmark* (√) pada kolom sesuai pilihan Anda.

| No | Kriteria | Sangat tidak penting | Tidak penting | Cukup penting | Penting | Sangat penting |
|----|---|----------------------|---------------|---------------|---------|----------------|
| 1. | Sesuai anthropometri dewasa dan lansia | | | | | |
| 2. | Tidak menimbulkan cedera saat digunakan | | | | | |
| 3. | Mudah digunakan | | | | | |
| 4. | Konstruksi kuat | | | | | |
| 5. | Tidak mudah rusak | | | | | |
| 6. | Mudah dalam perawatannya | | | | | |
| 7. | Ada alat bantu bangun dan untuk naik turun. | | | | | |
| 8. | Bahan rangka sesuai selera lansia | | | | | |
| 9. | Biaya pembuatan murah | | | | | |

Skor : Sangat tidak penting = 1
Tidak penting = 2
Cukup penting = 3
Penting = 4
Sangat penting = 5



Lampiran 2

Output SPSS Kuesioner

Output Kuesioner Untuk Lansia

Jenis Kelamin

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | pria | 8 | 20.0 | 20.0 | 20.0 |
| | wanita | 32 | 80.0 | 80.0 | 100.0 |
| | Total | 40 | 100.0 | 100.0 | |

USIA

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------|-----------|---------|---------------|--------------------|
| Valid | 60 - 70 thn | 27 | 67.5 | 67.5 | 67.5 |
| | 71 - 80 thn | 10 | 25.0 | 25.0 | 92.5 |
| | > 81 thn | 3 | 7.5 | 7.5 | 100.0 |
| | Total | 40 | 100.0 | 100.0 | |

Frekuensi Pemakaian Tempat Tidur Periksa

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------------|-----------|---------|---------------|--------------------|
| Valid | sering | 7 | 17.5 | 17.5 | 17.5 |
| | kadang - kadang | 28 | 70.0 | 70.0 | 87.5 |
| | tidak pernah | 5 | 12.5 | 12.5 | 100.0 |
| | Total | 40 | 100.0 | 100.0 | |

KESULITAN PENGGUNAAN TEMPAT TIDUR PERIKSA

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | ya | 26 | 74.3 | 74.3 | 74.3 |
| | tidak | 9 | 25.7 | 25.7 | 100.0 |
| | Total | 35 | 100.0 | 100.0 | |

Kesulitan yang Dialami Responden Saat Menggunakan Tempat Tidur Periksa

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | naik | 11 | 42.3 | 42.3 | 42.3 |
| | bangun | 8 | 30.8 | 30.8 | 73.1 |
| | turun | 7 | 26.9 | 26.9 | 100.0 |
| | Total | 26 | 100.0 | 100.0 | |

Kenyamanan Responden Saat Menggunakan Tempat Tidur Periksa

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | ya | 9 | 25.7 | 25.7 | 25.7 |
| | tidak | 26 | 74.3 | 74.3 | 100.0 |
| | Total | 35 | 100.0 | 100.0 | |

Bagian Tubuh Responden Yang Merasa Tidak Nyaman

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------|-----------|---------|---------------|--------------------|
| Valid | Pinggang | 12 | 46.2 | 46.2 | 46.2 |
| | Punggung | 10 | 38.5 | 38.5 | 84.6 |
| | Kaki | 2 | 7.7 | 7.7 | 92.3 |
| | Lainnya | 2 | 7.7 | 7.7 | 100.0 |
| | Total | 26 | 100.0 | 100.0 | |

Lampiran 3

HASIL PREFERENSI RESPONDEN

| No | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Total |
|----|----|----|----|----|----|----|----|----|----|-------|
| 1 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 38 |
| 2 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 37 |
| 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 29 |
| 4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 36 |
| 5 | 5 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 34 |
| 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 34 |
| 7 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 34 |
| 8 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 40 |
| 9 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 38 |
| 10 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 29 |
| 11 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 31 |
| 12 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 34 |
| 13 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 31 |
| 14 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 37 |
| 15 | 5 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 3 | 39 |
| 16 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 3 | 32 |
| 17 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 32 |
| 18 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 38 |
| 19 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 4 | 40 |
| 20 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 41 |
| 21 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 34 |
| 22 | 5 | 4 | 4 | 5 | 5 | 3 | 3 | 5 | 4 | 38 |
| 23 | 5 | 5 | 5 | 5 | 4 | 4 | 3 | 5 | 3 | 39 |
| 24 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 38 |
| 25 | 3 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 38 |
| 26 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 38 |
| 27 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 33 |
| 28 | 5 | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 2 | 36 |
| 29 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 5 | 3 | 39 |
| 30 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 3 | 39 |
| 31 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 5 | 38 |
| 32 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 41 |
| 33 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 31 |
| 34 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 4 | 2 | 38 |
| 35 | 5 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 2 | 30 |
| 36 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 30 |
| 37 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 38 |
| 38 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 35 |
| 39 | 4 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 38 |
| 40 | 5 | 5 | 3 | 5 | 4 | 3 | 3 | 4 | 4 | 36 |

Lampiran 4

***** Method 1 (space saver) will be used for this analysis

RELIABILITY ANALYSIS - SCALE (ALPHA)

| | | Mean | Std Dev | Cases |
|-----|-----|---------|---------|-------|
| 1. | Q1 | 4.3750 | .7403 | 40.0 |
| 2. | Q2 | 4.2500 | .7071 | 40.0 |
| 3. | Q3 | 3.9750 | .7334 | 40.0 |
| 4. | Q4 | 4.0500 | .7143 | 40.0 |
| 5. | Q5 | 4.0250 | .5305 | 40.0 |
| 6. | Q6 | 3.8750 | .6864 | 40.0 |
| 7. | Q7 | 4.0000 | .6405 | 40.0 |
| 8. | Q8 | 3.9000 | .6718 | 40.0 |
| 9. | Q9 | 3.3250 | .6558 | 40.0 |
| 10. | TOT | 35.7750 | 3.4677 | 40.0 |

| Statistics for | Mean | Variance | Std Dev | N of Variables |
|----------------|---------|----------|---------|----------------|
| SCALE | 71.5500 | 48.1000 | 6.9354 | 10 |

Item-Total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Alpha if Item Deleted |
|-----|----------------------------|--------------------------------|----------------------------------|-----------------------|
| Q1 | 67.1750 | 42.7635 | .4945 | .7141 |
| Q2 | 67.3000 | 41.1897 | .7063 | .6971 |
| Q3 | 67.5750 | 41.4814 | .6437 | .7012 |
| Q4 | 67.5000 | 42.2051 | .5802 | .7077 |
| Q5 | 67.5250 | 44.4609 | .4746 | .7231 |
| Q6 | 67.6750 | 42.2250 | .6058 | .7069 |
| Q7 | 67.5500 | 43.8949 | .4471 | .7212 |
| Q8 | 67.6500 | 45.4641 | .2411 | .7362 |
| Q9 | 68.2250 | 45.2558 | .2736 | .7338 |
| TOT | 35.7750 | 12.0250 | 1.0000 | .7376 |

Reliability Coefficients

N of Cases = 40.0

N of Items = 10

Alpha = .7377

Correlations

| | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | TOT |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|
| Q1 Pearson Correlation | 1.000 | .551** | .490** | .400* | .302 | .145 | .000 | .077 | -.152 | .573** |
| Q1 Sig. (2-tailed) | . | .000 | .001 | .011 | .058 | .372 | 1.000 | .635 | .350 | .000 |
| Q1 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q2 Pearson Correlation | .551** | 1.000 | .606** | .584** | .325* | .436** | .340* | -.054 | -.014 | .756** |
| Q2 Sig. (2-tailed) | .000 | . | .000 | .000 | .041 | .005 | .032 | .741 | .933 | .000 |
| Q2 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q3 Pearson Correlation | .490** | .606** | 1.000 | .590** | .199 | .350* | .218 | -.005 | .017 | .704** |
| Q3 Sig. (2-tailed) | .001 | .000 | . | .000 | .217 | .027 | .176 | .975 | .915 | .000 |
| Q3 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q4 Pearson Correlation | .400* | .584** | .590** | 1.000 | .267 | .275 | .056 | -.043 | .074 | .646** |
| Q4 Sig. (2-tailed) | .011 | .000 | .000 | . | .095 | .086 | .731 | .793 | .650 | .000 |
| Q4 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q5 Pearson Correlation | .302 | .325* | .199 | .267 | 1.000 | .220 | .151 | .223 | .197 | .533** |
| Q5 Sig. (2-tailed) | .058 | .041 | .217 | .095 | . | .172 | .353 | .167 | .223 | .000 |
| Q5 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q6 Pearson Correlation | .145 | .436** | .350* | .275 | .220 | 1.000 | .583** | .139 | .263 | .667** |
| Q6 Sig. (2-tailed) | .372 | .005 | .027 | .086 | .172 | . | .000 | .392 | .101 | .000 |
| Q6 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q7 Pearson Correlation | .000 | .340* | .218 | .056 | .151 | .583** | 1.000 | .119 | .244 | .519** |
| Q7 Sig. (2-tailed) | 1.000 | .032 | .176 | .731 | .353 | .000 | . | .464 | .129 | .001 |
| Q7 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q8 Pearson Correlation | .077 | -.054 | -.005 | -.043 | .223 | .139 | .119 | 1.000 | .308 | .331* |
| Q8 Sig. (2-tailed) | .635 | .741 | .975 | .793 | .167 | .392 | .464 | . | .053 | .037 |
| Q8 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Q9 Pearson Correlation | -.152 | -.014 | .017 | .074 | .197 | .263 | .244 | .308 | 1.000 | .360* |
| Q9 Sig. (2-tailed) | .350 | .933 | .915 | .650 | .223 | .101 | .129 | .053 | . | .023 |
| Q9 N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| TOT Pearson Correlation | .573** | .756** | .704** | .646** | .533** | .667** | .519** | .331* | .360* | 1.000 |
| TOT Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .001 | .037 | .023 | . |
| TOT N | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 40 |

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

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

Lampiran 5

Uji Keseragaman Data

JPK

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1 | 108,9 | 110,3 | 106,2 | 103,4 | 112 | 112,7 | 108,2 | 102 | 107,96 |
| 2 | 105,8 | 109 | 108,9 | 112,3 | 113 | 113,6 | 106 | 106,9 | 109,44 |
| 3 | 107,1 | 107,6 | 109,8 | 105,4 | 104,1 | 104,5 | 107,7 | 106,8 | 106,63 |
| 4 | 107,9 | 116,4 | 106,5 | 105,8 | 103,4 | 117,9 | 116,9 | 107,7 | 110,31 |
| 5 | 115,1 | 113,7 | 109,1 | 112,6 | 112,8 | 106,9 | 118 | 113,6 | 112,73 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 547,06 |

| | |
|-----------|---------|
| Rata-rata | 109,41 |
| BKA | 113,803 |
| BKB | 105,022 |
| SD | 4,1394 |
| SDr | 1,4635 |

TPD

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|------|------|------|------|------|------|------|--------|
| 1 | 38,5 | 39 | 37,8 | 38,6 | 40,2 | 38,3 | 37,8 | 37,3 | 38,44 |
| 2 | 38 | 40 | 39,6 | 40,7 | 39 | 42,7 | 39 | 39,3 | 39,79 |
| 3 | 41,2 | 41,7 | 40,5 | 39,1 | 38,5 | 40,2 | 43,5 | 40 | 40,59 |
| 4 | 39,8 | 45,8 | 41,5 | 39,2 | 38,6 | 44,7 | 46,6 | 41,3 | 42,19 |
| 5 | 43,2 | 40,6 | 38,1 | 41,6 | 38,2 | 38,7 | 45,2 | 39,4 | 40,63 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 201,63 |

| | |
|-----------|---------|
| Rata-rata | 40,33 |
| BKA | 42,9188 |
| BKB | 37,7382 |
| SD | 2,4388 |
| SDr | 0,8623 |

SDP

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|------|------|------|------|------|------|------|--------|
| 1 | 73,2 | 78 | 72 | 72,1 | 77,5 | 72,2 | 73 | 70,2 | 73,53 |
| 2 | 72,1 | 74,8 | 71,5 | 73,2 | 71,3 | 78,9 | 74 | 73 | 73,60 |
| 3 | 75,5 | 75,4 | 73 | 70,3 | 71 | 73,5 | 76 | 72,3 | 73,38 |
| 4 | 74 | 82 | 72,4 | 70,8 | 76,1 | 85,5 | 80 | 73,7 | 76,81 |
| 5 | 80,1 | 78,7 | 73,9 | 78,4 | 70 | 75,2 | 81,5 | 75,5 | 76,66 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 373,98 |

| | |
|-----------|---------|
| Rata-rata | 74,8 |
| BKA | 78,6401 |
| BKB | 70,9499 |
| SD | 3,6252 |
| SDr | 1,2817 |

TSB

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|------|------|------|------|------|------|------|--------|
| 1 | 89,4 | 91,1 | 88,3 | 87 | 94,1 | 91,6 | 92,2 | 83,6 | 89,66 |
| 2 | 86,3 | 89,2 | 89,3 | 94,3 | 93,7 | 95,6 | 89,7 | 87,7 | 90,73 |
| 3 | 89,9 | 83,7 | 87,2 | 87,8 | 88,5 | 87,1 | 87,2 | 89,2 | 87,58 |
| 4 | 88 | 98,2 | 89 | 88 | 85,7 | 98,5 | 96,3 | 83,5 | 90,90 |
| 5 | 96,7 | 92,8 | 79,5 | 93,8 | 88,7 | 88,7 | 98 | 86,7 | 90,61 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 449,48 |

| | |
|-----------|---------|
| Rata-rata | 89,9 |
| BKA | 94,5091 |
| BKB | 85,2809 |
| SD | 4,3502 |
| SDr | 1,538 |

TBB

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1 | 123,2 | 125,3 | 120 | 119,4 | 128,2 | 126,3 | 122,1 | 118 | 122,81 |
| 2 | 121,8 | 126 | 127,5 | 128,3 | 129,5 | 133,3 | 122 | 126,2 | 126,83 |
| 3 | 128,3 | 127,5 | 126,5 | 123,5 | 122,6 | 125,2 | 127,2 | 122,8 | 125,45 |
| 4 | 124,7 | 137,2 | 124,6 | 121 | 128,1 | 137,6 | 138,5 | 124 | 129,46 |
| 5 | 134,3 | 129,3 | 124,2 | 130,2 | 126 | 120,6 | 138,2 | 129,8 | 129,08 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 633,63 |

| | |
|-----------|----------|
| Rata-rata | 126,73 |
| BKA | 132,2133 |
| BKB | 121,2367 |
| SD | 5,1745 |
| SDr | 1,8294 |

DGT

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|-----|-----|-----|-----|-----|-----|-----|--------|
| 1 | 4,3 | 3,5 | 3,6 | 4,2 | 4,2 | 3,8 | 3,5 | 3,8 | 3,86 |
| 2 | 3,7 | 4 | 3,8 | 4,2 | 3,5 | 3,7 | 4,2 | 3,8 | 3,86 |
| 3 | 3,7 | 3,7 | 3,4 | 3,8 | 3,8 | 4,2 | 3,5 | 4 | 3,76 |
| 4 | 3,5 | 3,7 | 3,5 | 4,5 | 4,3 | 3,8 | 3,4 | 4,3 | 3,88 |
| 5 | 3,7 | 4,6 | 3,5 | 3,7 | 3,7 | 3,2 | 3,5 | 3,5 | 3,68 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 19,04 |

| | |
|-----------|--------|
| Rata-rata | 3,81 |
| BKA | 4,1625 |
| BKB | 3,4525 |
| SD | 0,3347 |
| SDr | 0,1183 |

PTK

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|------|------|------|------|------|------|------|--------|
| 1 | 19 | 21 | 21,8 | 20,8 | 22 | 19,3 | 21 | 20,5 | 20,68 |
| 2 | 22 | 21,3 | 22,2 | 23,5 | 22,3 | 24,2 | 21,4 | 23,2 | 22,51 |
| 3 | 22,6 | 21,2 | 22,7 | 19,1 | 20,7 | 21,6 | 22,7 | 22,4 | 21,63 |
| 4 | 22,6 | 25,7 | 22,1 | 21,6 | 23,4 | 25,3 | 24,7 | 21,8 | 23,40 |
| 5 | 23,8 | 23,7 | 21,7 | 23,4 | 22,6 | 21,7 | 25,2 | 23,4 | 23,19 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 111,40 |

| | |
|-----------|---------|
| Rata-rata | 22,28 |
| BKA | 23,9443 |
| BKB | 20,6157 |
| SD | 1,5691 |
| SDr | 0,5548 |

TTM

Tabel Perhitungan Harga Rata-Rata Sub Grup

| Sub Grup | Data (Xi) | | | | | | | | Rerata |
|---------------------------|-----------|------|------|------|------|------|------|------|--------|
| 1 | 21,3 | 24,7 | 21 | 19,4 | 22 | 22,6 | 21,5 | 21,8 | 21,79 |
| 2 | 22,4 | 22,8 | 23,3 | 24,6 | 21,7 | 24,7 | 22,6 | 22,4 | 23,06 |
| 3 | 21 | 23 | 23,1 | 22,8 | 22 | 20,5 | 21,8 | 22,7 | 22,11 |
| 4 | 21,9 | 23,5 | 25,4 | 20,6 | 23,6 | 22 | 23,2 | 24,2 | 23,05 |
| 5 | 22,8 | 22 | 21,8 | 22,4 | 23,6 | 21,6 | 23,5 | 22,1 | 22,48 |
| Jumlah Rata-Rata Sub Grup | | | | | | | | | 112,49 |

| | |
|-----------|---------|
| Rata-rata | 22,5 |
| BKA | 23,8187 |
| BKB | 21,1763 |
| SD | 1,2456 |
| SDr | 0,4404 |

Lampiran 6

Uji Kecukupan Data

| Dimensi antrop | N | N' |
|---|----|--------|
| 1. Jarak Popliteal ke Kepala lansia (JPK) | 40 | 4,982 |
| 2. Tinggi Popliteal Duduk lansia (TPD) | 40 | 12,725 |
| 3. Setengah Depa lansia (SDP) | 40 | 8,246 |
| 4. Tinggi Siku Berdiri lansia (TSB) | 40 | 8,220 |
| 5. Tinggi Bahu Berdiri lansia (TBB) | 40 | 5,851 |
| 6. Diameter Genggaman Tangan lansia (DGT) | 40 | 27,116 |
| 7. Panjang Telapak Kaki lansia (PTK) | 40 | 17,410 |
| 8. Tebal Tubuh maksimal lansia (TTM) | 40 | 10,760 |

Keterangan: Tingkat Kepercayaan: 99%

Tingkat Ketelitian: 5%

Lampiran 7

Uji Kenormalan Data

One-Sample Kolmogorov-Smirnov Test

| | | JPK |
|----------------------------------|----------------|----------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 109.6625 |
| | Std. Deviation | 4.1317 |
| Most Extreme Differences | Absolute | .129 |
| | Positive | .129 |
| | Negative | -.089 |
| Kolmogorov-Smirnov Z | | .817 |
| Asymp. Sig. (2-tailed) | | .517 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | TPD |
|----------------------------------|----------------|---------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 40.4750 |
| | Std. Deviation | 2.6957 |
| Most Extreme Differences | Absolute | .167 |
| | Positive | .167 |
| | Negative | -.136 |
| Kolmogorov-Smirnov Z | | 1.055 |
| Asymp. Sig. (2-tailed) | | .216 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | SDP |
|----------------------------------|----------------|---------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 74.7950 |
| | Std. Deviation | 3.6252 |
| Most Extreme Differences | Absolute | .162 |
| | Positive | .162 |
| | Negative | -.093 |
| Kolmogorov-Smirnov Z | | 1.023 |
| Asymp. Sig. (2-tailed) | | .246 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | TSB |
|----------------------------------|----------------|---------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 89.8950 |
| | Std. Deviation | 4.3502 |
| Most Extreme Differences | Absolute | .150 |
| | Positive | .150 |
| | Negative | -.081 |
| Kolmogorov-Smirnov Z | | .946 |
| Asymp. Sig. (2-tailed) | | .333 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | TBB |
|----------------------------------|----------------|----------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 126.7250 |
| | Std. Deviation | 5.1692 |
| Most Extreme Differences | Absolute | .130 |
| | Positive | .130 |
| | Negative | -.079 |
| Kolmogorov-Smirnov Z | | .924 |
| Asymp. Sig. (2-tailed) | | .505 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | DGT |
|----------------------------------|----------------|--------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 3.8075 |
| | Std. Deviation | .3347 |
| Most Extreme Differences | Absolute | .209 |
| | Positive | .209 |
| | Negative | -.130 |
| Kolmogorov-Smirnov Z | | 1.321 |
| Asymp. Sig. (2-tailed) | | .061 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | PTK |
|----------------------------------|----------------|---------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 22.2800 |
| | Std. Deviation | 1.5691 |
| Most Extreme Differences | Absolute | .094 |
| | Positive | .094 |
| | Negative | -.057 |
| Kolmogorov-Smirnov Z | | .598 |
| Asymp. Sig. (2-tailed) | | .868 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | TTM |
|----------------------------------|----------------|---------|
| N | | 40 |
| Normal Parameters ^{a,b} | Mean | 22.4975 |
| | Std. Deviation | 1.2456 |
| Most Extreme Differences | Absolute | .080 |
| | Positive | .080 |
| | Negative | -.063 |
| Kolmogorov-Smirnov Z | | .507 |
| Asymp. Sig. (2-tailed) | | .959 |

a. Test distribution is Normal.

b. Calculated from data.

Lampiran 8

Hasil Uji Coba Menurut Responden dalam Penentuan Posisi Alat Bantu Bangun pada Tempat Tidur Periksa Bagi Pasien Lansia

| No | Nama Responden | Posisi Alat Bantu Bangun | |
|----|----------------------|--------------------------|--------------|
| | | Siku | Ujung tangan |
| 1 | Ny.Kasan | √ | |
| 2 | Ny.Suwarti | √ | |
| 3 | Ny.Painem | √ | |
| 4 | Ny.Ponco Dikromo | √ | |
| 5 | Ny.Rubiyati | √ | |
| 6 | Ny.Marmo Suwito | √ | |
| 7 | Ny.Mendip | √ | |
| 8 | Ny.Darmo Suwito | √ | |
| 9 | Ny.Asmo Rejo | √ | |
| 10 | Ny.Sumiyem | √ | |
| 11 | Ny.Sanikem | | √ |
| 12 | Ny.Parinem | √ | |
| 13 | Ny.Jami | √ | |
| 14 | Bp.Sosro Sumpeno | √ | |
| 15 | Ny.Mulyo Suwito | √ | |
| 16 | Ny.Adi Sadinem | √ | |
| 17 | Ny.Lasikem | | √ |
| 18 | Ny.Sadiyem | √ | |
| 19 | Ny.Arjo Juminten | | √ |
| 20 | Ny.Semi | √ | |
| 21 | Ny.Sariyem | √ | |
| 22 | Ny.Mangun Rejo | | √ |
| 23 | Ny.Sajem | √ | |
| 24 | Ny.Siwuh | | √ |
| 25 | Ny.Anastasia Kaminem | √ | |
| 26 | Bp.Subari | | √ |
| 27 | Ny.Wito Taruno | √ | |
| 28 | Ny.Jo Setomo | √ | |
| 29 | Ny.Partomo | √ | |
| 30 | Bp.Cipto Sudarmo | √ | |
| 31 | Bp.Wono | | √ |

Lanjutan

| No | Nama Responden | Posisi Alat Bantu Bangun | |
|------------|-----------------------|--------------------------|--------------|
| | | Siku | Ujung tangan |
| 32 | Ny.Sabrina Wasikem | | √ |
| 33 | Bp.Wono | √ | |
| 34 | Ny.Dalikem | √ | |
| 35 | Ny.Mangun Taruno | √ | |
| 36 | Bp.Gono | √ | |
| 37 | Ny.Ginem | | √ |
| 38 | Ny.Wagiyah | √ | |
| 39 | Bp.Merto Kino | √ | |
| 40 | Bp.Atmo Sigeng | √ | |
| Jumlah | | 31 | 9 |
| Persen (%) | | 77.5 | 22.5 |

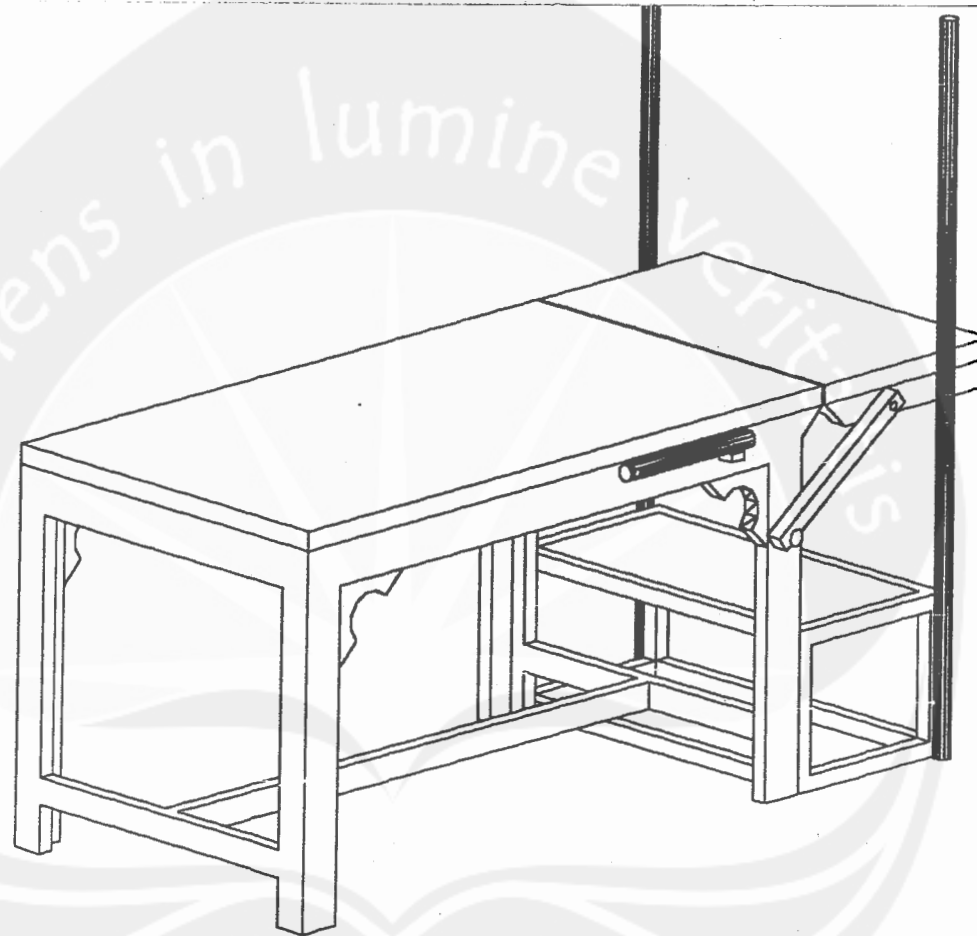
Lampiran 9

Tabel R 5%

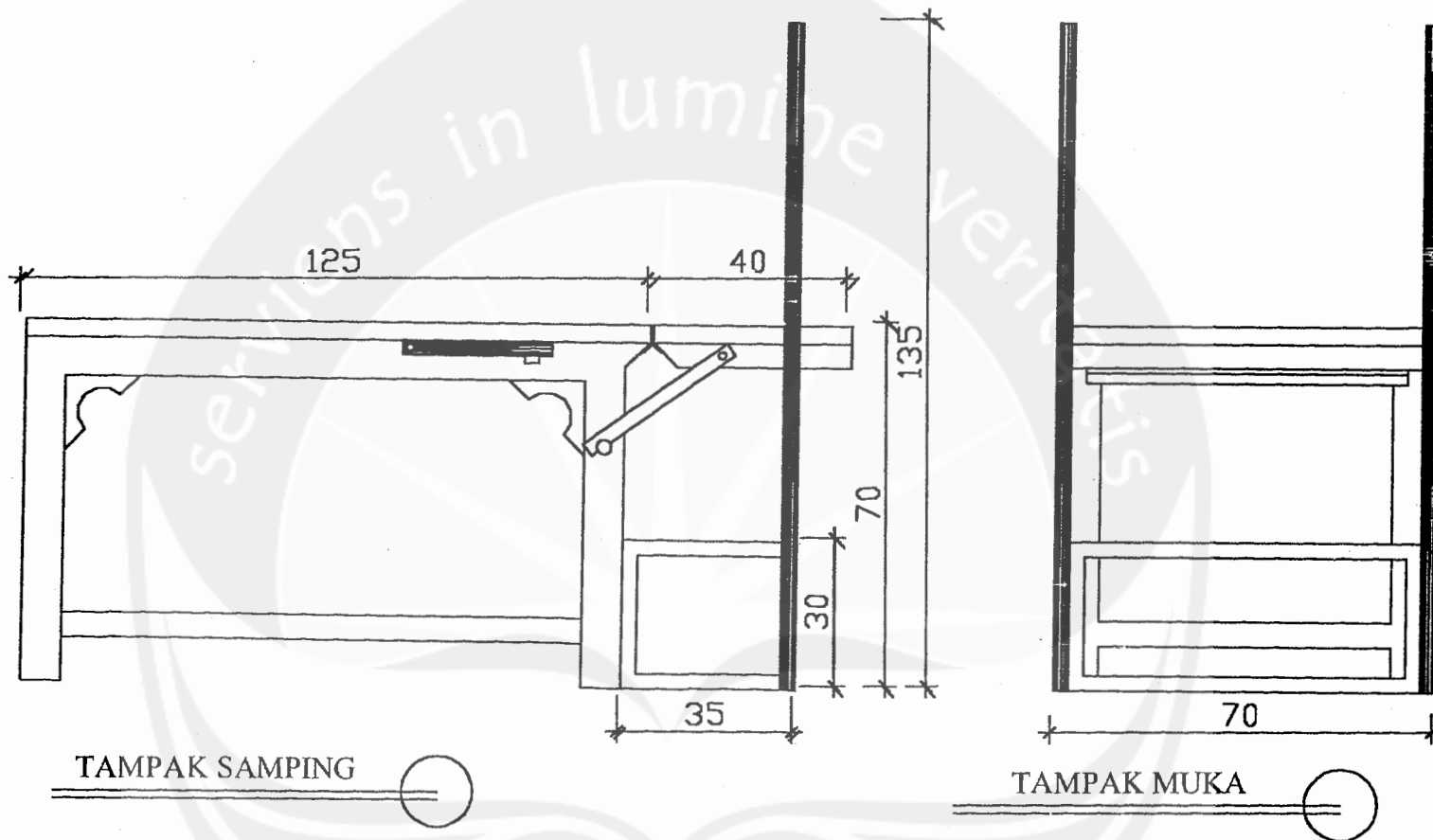
| TABEL R 5 % | | | | | | | |
|-------------|-------|----|-------|-----|-------|-----|-------|
| N | R | N | R | N | R | N | R |
| 1 | 0,951 | 51 | 0,179 | 101 | 0,127 | 151 | 0,104 |
| 2 | 0,800 | 52 | 0,177 | 102 | 0,127 | 152 | 0,104 |
| 3 | 0,687 | 53 | 0,175 | 103 | 0,126 | 153 | 0,103 |
| 4 | 0,608 | 54 | 0,174 | 104 | 0,250 | 154 | 0,103 |
| 5 | 0,551 | 55 | 0,172 | 105 | 0,125 | 155 | 0,103 |
| 6 | 0,507 | 56 | 0,171 | 106 | 0,124 | 156 | 0,103 |
| 7 | 0,472 | 57 | 0,169 | 107 | 0,124 | 157 | 0,102 |
| 8 | 0,443 | 58 | 0,168 | 108 | 0,123 | 158 | 0,102 |
| 9 | 0,419 | 59 | 0,166 | 109 | 0,123 | 159 | 0,102 |
| 10 | 0,398 | 60 | 0,165 | 110 | 0,122 | 160 | 0,102 |
| 11 | 0,380 | 61 | 0,164 | 111 | 0,121 | 161 | 0,101 |
| 12 | 0,365 | 62 | 0,162 | 112 | 0,121 | 162 | 0,101 |
| 13 | 0,351 | 63 | 0,161 | 113 | 0,120 | 163 | 0,101 |
| 14 | 0,338 | 64 | 0,160 | 114 | 0,120 | 164 | 0,100 |
| 15 | 0,327 | 65 | 0,159 | 115 | 0,119 | 165 | 0,100 |
| 16 | 0,317 | 66 | 0,157 | 116 | 0,119 | 166 | 0,100 |
| 17 | 0,308 | 67 | 0,156 | 117 | 0,118 | 167 | 0,099 |
| 18 | 0,299 | 68 | 0,155 | 118 | 0,118 | 168 | 0,099 |
| 19 | 0,291 | 69 | 0,154 | 119 | 0,117 | 169 | 0,098 |
| 20 | 0,284 | 70 | 0,153 | 120 | 0,117 | 170 | 0,098 |
| 21 | 0,277 | 71 | 0,152 | 121 | 0,116 | 171 | 0,098 |
| 22 | 0,271 | 72 | 0,151 | 122 | 0,116 | 172 | 0,098 |
| 23 | 0,265 | 73 | 0,150 | 123 | 0,115 | 173 | 0,097 |
| 24 | 0,260 | 74 | 0,149 | 124 | 0,115 | 174 | 0,097 |
| 25 | 0,255 | 75 | 0,148 | 125 | 0,114 | 175 | 0,097 |
| 26 | 0,250 | 76 | 0,147 | 126 | 0,114 | 176 | 0,097 |
| 27 | 0,245 | 77 | 0,146 | 127 | 0,114 | 177 | 0,096 |
| 28 | 0,241 | 78 | 0,145 | 128 | 0,113 | 178 | 0,096 |
| 29 | 0,237 | 79 | 0,144 | 129 | 0,113 | 179 | 0,096 |
| 30 | 0,233 | 80 | 0,143 | 130 | 0,112 | 180 | 0,095 |

Lanjutan Tabel R 5%

| TABEL R 5 % | | | | | | | |
|-------------|-------|-----|-------|-----|-------|-----|-------|
| N | R | N | R | N | R | N | R |
| 31 | 0,229 | 81 | 0,142 | 131 | 0,112 | 181 | 0,095 |
| 32 | 0,225 | 82 | 0,141 | 132 | 0,111 | 182 | 0,095 |
| 33 | 0,222 | 83 | 0,14 | 133 | 0,111 | 183 | 0,095 |
| 34 | 0,219 | 84 | 0,14 | 134 | 0,111 | 184 | 0,094 |
| 35 | 0,216 | 85 | 0,139 | 135 | 0,110 | 185 | 0,094 |
| 36 | 0,213 | 86 | 0,138 | 136 | 0,110 | 186 | 0,094 |
| 37 | 0,210 | 87 | 0,137 | 137 | 0,109 | 187 | 0,094 |
| 38 | 0,207 | 88 | 0,136 | 138 | 0,109 | 188 | 0,093 |
| 39 | 0,204 | 89 | 0,136 | 139 | 0,109 | 189 | 0,093 |
| 40 | 0,202 | 90 | 0,135 | 140 | 0,108 | 190 | 0,093 |
| 41 | 0,199 | 91 | 0,134 | 141 | 0,108 | 191 | 0,093 |
| 42 | 0,197 | 92 | 0,133 | 142 | 0,107 | 192 | 0,092 |
| 43 | 0,195 | 93 | 0,133 | 143 | 0,107 | 193 | 0,092 |
| 44 | 0,192 | 94 | 0,132 | 144 | 0,107 | 194 | 0,092 |
| 45 | 0,19 | 95 | 0,131 | 145 | 0,106 | 195 | 0,092 |
| 46 | 0,188 | 96 | 0,131 | 146 | 0,106 | 196 | 0,091 |
| 47 | 0,186 | 97 | 0,13 | 147 | 0,106 | 197 | 0,091 |
| 48 | 0,184 | 98 | 0,129 | 148 | 0,105 | 198 | 0,091 |
| 49 | 0,182 | 99 | 0,129 | 149 | 0,105 | 199 | 0,091 |
| 50 | 0,181 | 100 | 0,128 | 150 | 0,105 | 200 | 0,091 |



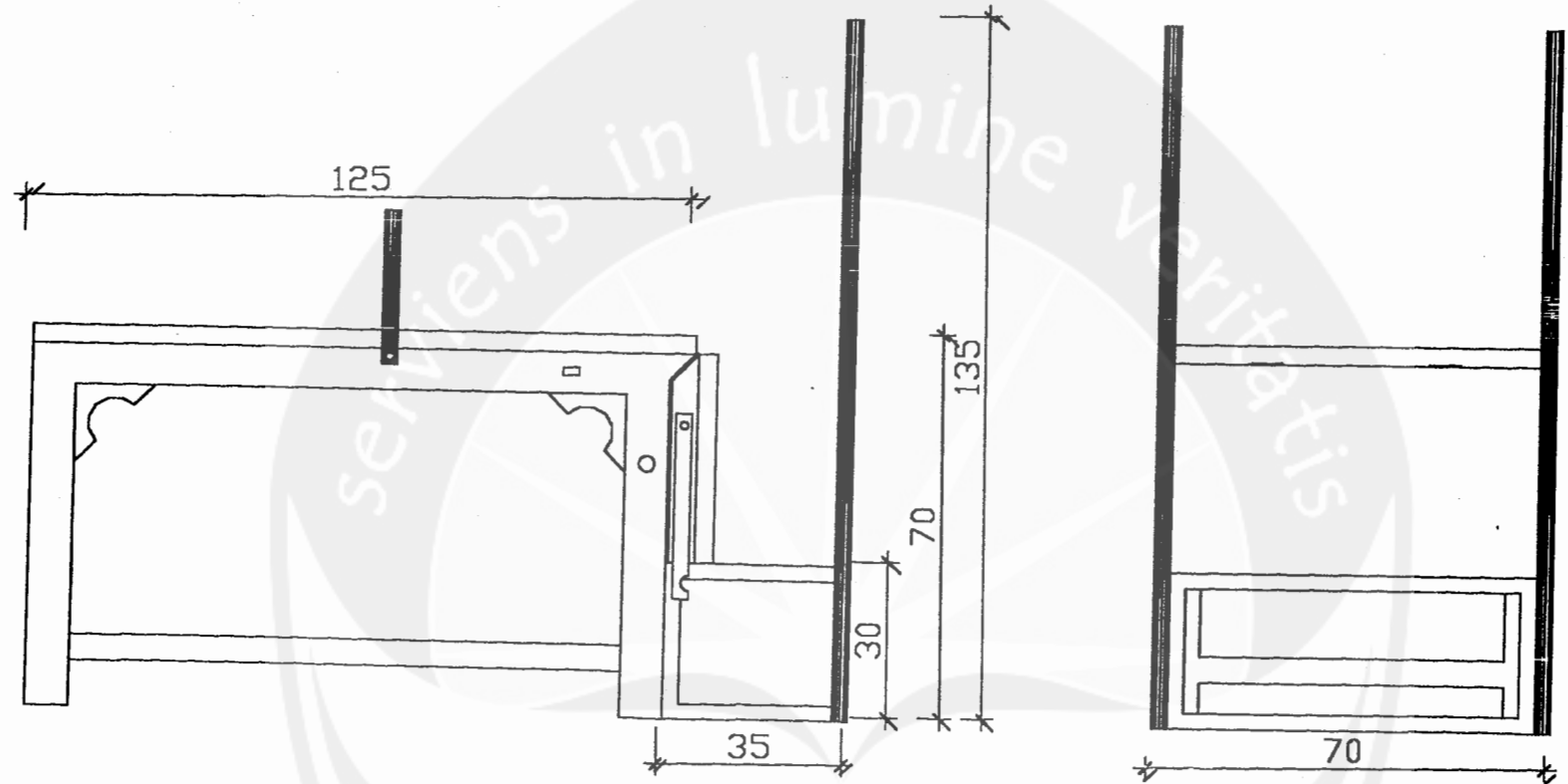
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|--------------------------------|-------------------------|-----------------------------|-----------------|
| <i>Revision Index</i> | Drawn by : ISABELA META | | Scale : 1:10 |
| | Reg. Nr. : 02 06 03255 | | Unit : Cm |
| | Date : 20-5-2007 | | Material : Kayu |
| | Checked by : | | Sign : |
| A4 | | TEMPAT TIDUR PERIKSA | |
| INDUSTRIAL ENGINEERING UAJY | | <i>Operation</i> | <i>Dwg. Nr.</i> |
| <i>Origin.</i> | <i>Rep.</i> | <i>Rep.by.</i> | <i>SN. NS.</i> |



TAMPAK SAMPING

TAMPAK MUKA

| | | |
|--------------------------------|-------------------------|----------------------|
| Revision Index | Drawn by : ISABELA META | Scale : 1:10 |
| | Reg. Nr. : 02 06 03255 | Unit : Cm |
| | Date : 20-5-2007 | Material : Kayu |
| | Checked by : | Sign : |
| A4 | | TEMPAT TIDUR PERIKSA |
| INDUSTRIAL ENGINEERING UAJY | Operation | Dwg. Nr. |
| Origin. | Rep. | Rep.by. |
| | | SM. NS. |



TAMPAK SAMPING

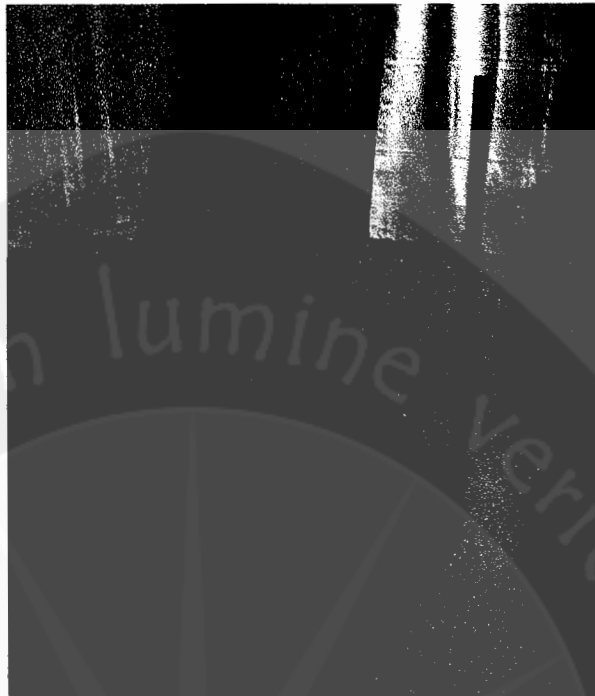
TAMPAK MUKA

| | | |
|--------------------------------|-------------------------|-----------------------------|
| Revision Index | Drawn by : ISABELA META | Scale : 1:10 |
| | Reg. Nr. : 02 06 03255 | Unit : Cm |
| | Date : 20-5-2007 | Material : Kayu |
| | Checked by : | Sign : |
| A4 | | TEMPAT TIDUR PERIKSA |
| INDUSTRIAL ENGINEERING UAJY | | Operation |
| Origin. | Rep. | Dwg. Nr. |
| | Rep.by. | SN. NS. |

Lampiran 10

**Tempat Tidur Periksa Bagi Pasien Lansia
Hasil Rancangan**

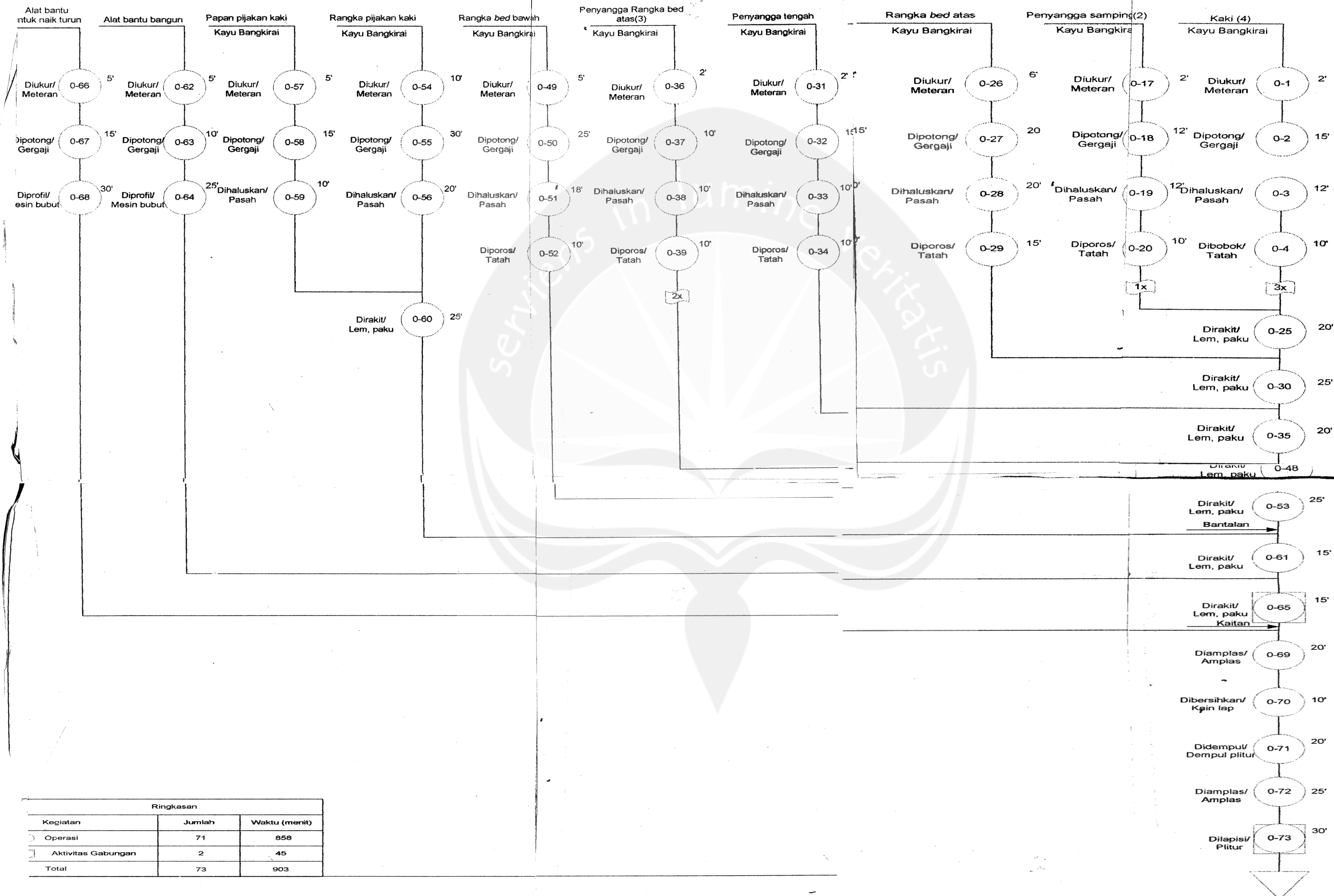




Posisi Pasien Duduk



Dokter + Pasien Saat Proses Pemeriksaan



| Ringkasan | | |
|--------------------|-----------|---------------|
| Kegiatan | Jumlah | Waktu (menit) |
| Operasi | 71 | 858 |
| Aktivitas Gabungan | 2 | 45 |
| Total | 73 | 903 |