

## DAFTAR PUSTAKA

1. Smeltzer, Suzzane C. Buku Ajar Keperawatan Medikal Bedah Vol.3. Jakarta: EGC; 2001
2. Corwin, Elizabeth J. Buku Saku Patofisiologi. Jakarta: EGC; 2000.
3. Herndon D (ed.). "Chapter 1: A Brief History of Acute Burn Care Management". Total Burn Care (4<sup>th</sup> ed.). Edinburgh: Saunders; 2012.
4. Peck, MD. "Epidemiology of burns throughout the world. Part I: Distribution and risk factors". Burns: Journal of the International Society for Burn Injuries 37; 2011 : (7): 1087-100
5. Sjamsudiningrat R, De Jong W. Buku Ajar Ilmu Bedah. Jakarta: EGC; 2005.
6. Martyarini, Shazita Adiba. Efek Madu dalam Proses Epitelisasi Luka Bakar Derajat Dua Dangkal. Semarang: Fakultas Kedokteran Universitas Diponegoro; 2011.
7. Yovita, Safriani. Penanganan Luka Bakar. Available from [http://www1-media.acehprov.go.id/uploads/PENANGANAN\\_LUKA\\_BAKAR.pdf](http://www1-media.acehprov.go.id/uploads/PENANGANAN_LUKA_BAKAR.pdf) , accessed on January 10<sup>th</sup> 2016.
8. Roberts, edited by Michael C. Handbook of Pediatric Psychology. (4<sup>th</sup> ed). New York: Guilford; 2009.
9. Townseed M. Buku Saku Ilmu Bedah SABISTON 17<sup>th</sup> ed. (Rendy L, ed). New York: EGC; 2010.
10. Pizorno, J.E. and M.T. Murray. A Textbook of Natural Medicine: Allium sativum. Edisi ke-2. Washington: Bastyr University; 2000.
11. Thomas, A.N.S. Tanaman Obat Tradisional I Edisi ke-13. Yogyakarta: Penerbit Kanisius; 2000.
12. Santoso, Marcella Yessi. Efek Bawang Putih (Allium sativum Linn) terhadap Penurunan Tekanan Darah Pria Dewasa. Bandung: FK Universitas Kristen Maranatha; 2011.
13. Ramadanti, Irmudita Ari. Uji Aktifitas Antibakteri Ekstrak Bawang Putih (Allium sativum Linn) terhadap Bakter Escherichia Coli In Vitro. Semarang: FK Universitas Diponegoro; 2008.
14. Anonymous. Allium sativum L. Available from [http://www.warintek.ristek.go.id/pangan\\_kesehatan/tanaman\\_obat/depkes/1-013.pdf](http://www.warintek.ristek.go.id/pangan_kesehatan/tanaman_obat/depkes/1-013.pdf) , accessed on December 20<sup>th</sup> 2015.

15. Latief, H Abdul. *Obat Tradisional*. Jakarta: EGC; 2014.
16. Banerjee, S.K, S. K. Maulik. Effect of garlic on cardiovascular disorders: a review. *Nutrition Journal* 1; 2002 : (4): 1-14
17. Tattelman E. Health Effects of Farlic. *Am Fam Physician*; 2005: 72(1):1036
18. Rivlin RS. Historical Perspective on the Use of Garlic. *J Nutr*; 2001: 131(3Supp):951-4
19. Zhang, X. 1999. *WHO Monographs on Selected Medicinal Plants: Bulbus Allii Sativii*. Geneva: World Health Organization.
20. Song, K. and J. A. Milner. 2001. The influence of heating on the anticancer properties of garlic. *Journal of Nutrition* 131: 1054S–1057S
21. Amagase, H., B.L. Petesch, H. Matsuura, S. Kasuga, and Y. Itakura. 2001. Intake of garlic and bioactive components. *Journal of Nutrition* 131 (3): 955S– 962S
22. Apitz-Castro, R., S. Cabrera, M.R. Cruz, E. Ledezma, and M.K. Jain. 1983. Effects of garlic extract and of three pure components isolated from it on human platelet aggregation, arachidonate metabolism, release reaction and platelet ultrastructure. *Thrombine Research* 32 (2): 155–159.
23. Marieb, E.N. 1997. *Human Anatomy and Physiology*. Edisi ke-4. New York: Benjamin/Cummings Science Publishing.
24. Lawson, L.D., D.K. Ransom, and B.G. Hughes. 1992. Inhibition of whole blood platelet-aggregation by compounds in garlic cloves extracts and commercial garlic products. *Thrombine Research* 65 (2): 141–156.
25. Mabey, R., M. McIntyre, P. Michael, G. Duff and J. Stevens. 1988. *The New Herbalist*. New York: Macmillan.
26. Howe, L. 1997. *Great Garlic: A Miracle Right Under Our Noses*. <http://wellweb.com/ALTERN/column/garlic.html> , accessed on January 5<sup>th</sup> 2016.
27. Grace, Pierce A. Borley, Neil R. *At a Glance Ilmu Bedah* ed. 3. Jakarta: PT. Erlangga; 2006.
28. Moenadjat, Y. *Luka Bakar Masalah dan Tatalaksana*. Fakultas Kedokteran Universitas Indonesia. Jakarta: FK UI; 2009.
29. Hettiaratchy, Shehan, Pacinii, Remo. Initial Management Of Major Burn : II-assessment ana Resucitation; 2004. Avai;able from <http://ncbi.nlm.nih.gov/pmc/articles/PMC449823/> , accessed on January 31<sup>st</sup> 2016.

30. Shuid, Ahmad Nazrun, dkk. The Effects of Carica Papaya Linn. Latex on the Healing of Burn Wounds in Rats. Kuala Lumpur: Universiti Kebangsaan Malaysia; 2005.
31. Cintami, Almahita. Pengaruh Ekstrak Aqueous Kulit Delima (*Punica granatum*) Peroral terhadap Makrofag, Fibroblas, dan Kolagen pada Penyembuhan Luka Bakar Tikus Putih. Surabaya: Universitas Airlangga; 2013.
32. DeLaune, S.C. & Ladner, P.K. Fundamentals of Nursing: Standards and Practice (2<sup>nd</sup> edition). New York: Delmar; 2002.
33. World Health Organization. Research Guidelines for Evaluating the Safety and Efficacy of Herbal Medicines [series online]. c1993. [last update: December 17<sup>th</sup>2015]. WHO Medicines Publications and Documentation Home. Available from <http://apps.who.int/medicinedocs/en/d/Jh2946e/1.html#Jh2946e.1> , accessed on February 3<sup>rd</sup> 2016.
34. Sussman, Carrie, Bates-Jensen, Barbara M. Wound Care: A Collaborative Practice Manual for Health Professionals. Philadelphia: Lippincot Willian & Wilkins; 2011.

## Lampiran 1. Ethical Clearance

	<p><b>KOMISI ETIK PENELITIAN KESEHATAN (KEPK) FAKULTAS KEDOKTERAN UNIVERSITAS DIPONEGORO DAN RSUP dr KARIADI SEMARANG</b> Sekretariat : Kantor Dekanat FK Undip Lt.3 Jl. Dr. Soefomo 18, Semarang Telp/Fax. 024-8318350</p>	
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**ETHICAL CLEARANCE**  
No. 281 /EC/FK-RSDK/2016

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

**"PENGARUH BAWANG PUTIH (*Allium sativum* L) TERHADAP PENYEMBUHAN LUKA BAKAR DERAJAT II DANGKAL PADA TIKUS WISTAR"**

**Peneliti Utama :** *Zeta Aisyah Bestari*

**Pembimbing :** 1. Indah Saraswati, S. Si, M. Sc  
2. dr. Dea Amarilisa Adespin, M.Kes

**Penelitian :** Dilaksanakan di Laboratorium Biologi Fakultas Matematika dan Ilmu Pengetahuan Alam (FMIPA) Universitas Negeri Semarang dan Laboratorium Kimia Pangan FK UNDIP

Setuju untuk dilaksanakan, dengan memperhatikan prinsip-prinsip yang dinyatakan dalam Deklarasi Helsinki 1975, yang diamended di Seoul 2008 dan Pedoman Nasional Etik Penelitian Kesehatan (PNEPK) Departemen Kesehatan RI 2011

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

Semarang, 22 MAR 2016

  
Ketua  
**Suprihati, M.Sc, Sp.THT-KL(K)**  
NIP. 19500621 197703 2 001

## Lampiran 2. Surat Ijin Penelitian



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI  
UNIVERSITAS NEGERI SEMARANG  
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM  
LABORATORIUM JURUSAN BIOLOGI  
Gedung D 11 Kampus Sekaran Gunungpati Semarang  
Website : <http://biologi.unnes.ac.id>

Semarang, 7 Maret 2016

Nomor : 246/UN.37.L4.5/PP/2015  
Lampiran :  
Perihal : Permohonan Ijin Tempat Penelitian

Yth.  
Pembantu Dekan I  
Universitas Diponegoro

Dengan hormat,  
Menjawab Surat saudara No. 1650/UN7.3.4/DI/PP/2016 tanggal 26 Februari 2016  
perihal permohonan ijin tempat penelitian dengan menggunakan hewan percobaan,  
atas nama:

1. Nama : Zeta Aisyah Bestari  
NIM : 22010112110138  
Judul : Pengaruh Bawang Putih (*Allium sativum* L) terhadap Penyembuhan  
Luka Bakar Derajat II Dangkal pada Tikus Wistar
2. Nama : Marko Darmawan  
NIM : 22010113130193  
Judul : Pengaruh Ekstrak Apel Manalagi (*Mallus sylvestris* Mill) terhadap  
Penyembuhan Luka Bakar Derajat II Dangkal pada Tikus Wistar

Dengan ini kami beritahukan bahwa permohonan ijin tersebut dapat kami setujui .  
sesuai peraturan yang berlaku. Adapun pelaksanaannya akan dibantu oleh teknisi  
kami sdr. Kartika Widya.

Demikian kami sampaikan, atas perhatian dan kerjasamanya di ucapkan terimakasih



Pengelola Kandang Hewan Coba

  
drh. Wulan Christijanti, M.Si.  
NIP. 196809111996032001

## Lampiran 3.

# BATES-JENSEN WOUND ASSESSMENT TOOL

## Instructions for use

### General Guidelines:

Fill out the attached rating sheet to assess a wound's status after reading the definitions and methods of assessment described below. Evaluate once a week and whenever a change occurs in the wound. Rate according to each item by picking the response that best describes the wound and entering that score in the item score column for the appropriate date. When you have rated the wound on all items, determine the total score by adding together the 13-item scores. The HIGHER the total score, the more severe the wound status. Plot total score on the Wound Status Continuum to determine progress.

### Specific Instructions:

- Size:** Use ruler to measure the longest and widest aspect of the wound surface in centimeters; multiply length x width.
- Depth:** Pick the depth, thickness, most appropriate to the wound using these additional descriptions:
  - 1 = tissues damaged but no break in skin surface.
  - 2 = superficial, abrasion, blister or shallow crater. Even with, &/or elevated above skin surface (e.g., hyperplasia).
  - 3 = deep crater with or without undermining of adjacent tissue.
  - 4 = visualization of tissue layers not possible due to necrosis.
  - 5 = supporting structures include tendon, joint capsule.
- Edges:** Use this guide:

Indistinct, diffuse	=	unable to clearly distinguish wound outline.
Attached	=	even or flush with wound base, <u>no</u> sides or walls present; flat.
Not attached	=	sides or walls <u>are</u> present; floor or base of wound is deeper than edge.
Rolled under, thickened	=	soft to firm and flexible to touch.
Hyperkeratosis	=	callous-like tissue formation around wound & at edges.
Fibrotic, scarred	=	hard, rigid to touch.
- Undermining:** Assess by inserting a cotton tipped applicator under the wound edge; advance it as far as it will go without using undue force; raise the tip of the applicator so it may be seen or felt on the surface of the skin; mark the surface with a pen; measure the distance from the mark on the skin to the edge of the wound. Continue process around the wound. Then use a transparent metric measuring guide with concentric circles divided into 4 (25%) pie-shaped quadrants to help determine percent of wound involved.
- Necrotic Tissue Type:** Pick the type of necrotic tissue that is predominant in the wound according to color, consistency and adherence using this guide:

White/gray non-viable tissue	=	may appear prior to wound opening; skin surface is white or gray.
Non-adherent, yellow slough	=	thin, mucinous substance; scattered throughout wound bed; easily separated from wound tissue.
Loosely adherent, yellow slough	=	thick, stringy, clumps of debris; attached to wound tissue.
Adherent, soft, black eschar	=	soggy tissue; strongly attached to tissue in center or base of wound.
Firmly adherent, hard/black eschar	=	firm, crusty tissue; strongly attached to wound base <u>and</u> edges (like a hard scab).

6. **Necrotic Tissue Amount:** Use a transparent metric measuring guide with concentric circles divided into 4 (25%) pie-shaped quadrants to help determine percent of wound involved.
7. **Exudate Type:** Some dressings interact with wound drainage to produce a gel or trap liquid. Before assessing exudate type, gently cleanse wound with normal saline or water. Pick the exudate type that is predominant in the wound according to color and consistency, using this guide:
- |                 |   |   |
|-----------------|---|---|
| Bloody          | = | thin, bright red                                  |
| Serosanguineous | = | thin, watery pale red to pink                     |
| Serous          | = | thin, watery, clear                               |
| Purulent        | = | thin or thick, opaque tan to yellow               |
| Foul purulent   | = | thick, opaque yellow to green with offensive odor |
8. **Exudate Amount:** Use a transparent metric measuring guide with concentric circles divided into 4 (25%) pie-shaped quadrants to determine percent of dressing involved with exudate. Use this guide:
- |          |   |  |
|----------|---|--|
| None     | = | wound tissues dry.   |
| Scant    | = | wound tissues moist; no measurable exudate.  |
| Small    | = | wound tissues wet; moisture evenly distributed in wound; drainage involves $\leq 25\%$ dressing.   |
| Moderate | = | wound tissues saturated; drainage may or may not be evenly distributed in wound; drainage involves $> 25\%$ to $\leq 75\%$ dressing.             |
| Large    | = | wound tissues bathed in fluid; drainage freely expressed; may or may not be evenly distributed in wound; drainage involves $> 75\%$ of dressing. |
9. **Skin Color Surrounding Wound:** Assess tissues within 4cm of wound edge. Dark-skinned persons show the colors "bright red" and "dark red" as a deepening of normal ethnic skin color or a purple hue. As healing occurs in dark-skinned persons, the new skin is pink and may never darken.
10. **Peripheral Tissue Edema & Induration:** Assess tissues within 4cm of wound edge. Non-pitting edema appears as skin that is shiny and taut. Identify pitting edema by firmly pressing a finger down into the tissues and waiting for 5 seconds, on release of pressure, tissues fail to resume previous position and an indentation appears. Induration is abnormal firmness of tissues with margins. Assess by gently pinching the tissues. Induration results in an inability to pinch the tissues. Use a transparent metric measuring guide to determine how far edema or induration extends beyond wound.
11. **Granulation Tissue:** Granulation tissue is the growth of small blood vessels and connective tissue to fill in full thickness wounds. Tissue is healthy when bright, beefy red, shiny and granular with a velvety appearance. Poor vascular supply appears as pale pink or blanched to dull, dusky red color.
12. **Epithelialization:** Epithelialization is the process of epidermal resurfacing and appears as pink or red skin. In partial thickness wounds it can occur throughout the wound bed as well as from the wound edges. In full thickness wounds it occurs from the edges only. Use a transparent metric measuring guide with concentric circles divided into 4 (25%) pie-shaped quadrants to help determine percent of wound involved and to measure the distance the epithelial tissue extends into the wound.

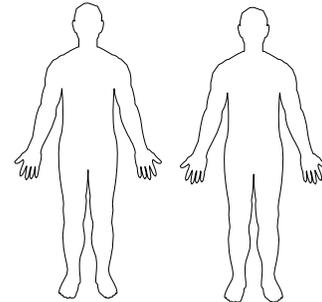
# BATES-JENSEN WOUND ASSESSMENT TOOL

NAME \_\_\_\_\_

Complete the rating sheet to assess wound status. Evaluate each item by picking the response that best describes the wound and entering the score in the item score column for the appropriate date.

**Location:** Anatomic site. Circle, identify right (**R**) or left (**L**) and use "X" to mark site on body diagrams:

- |                          |                     |
|--------------------------|---------------------|
| _____ Sacrum & coccyx    | _____ Lateral ankle |
| _____ Trochanter         | _____ Medial ankle  |
| _____ Ischial tuberosity | _____ Heel          |
- Other Site \_\_\_\_\_



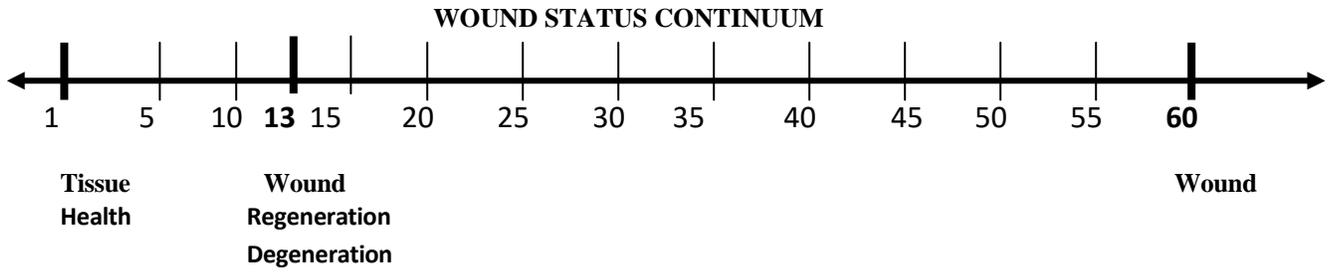
**Shape:** Overall wound pattern; assess by observing perimeter and depth.

Circle and date appropriate description:

- |                        |                           |
|------------------------|---------------------------|
| _____ Irregular        | _____ Linear or elongated |
| _____ Round/oval       | _____ Bowl/boat           |
| _____ Square/rectangle | _____ Butterfly           |
- Other Shape \_\_\_\_\_

Item	Assessment	Date Score	Date Score	Date Score
<b>1. Size</b>	1 = Length x width <4 sq cm 2 = Length x width 4--<16 sq cm 3 = Length x width 16.1--<36 sqcm 4 = Length x width 36.1--<80 sqcm 5 = Length x width >80 sq cm			
<b>2. Depth</b>	1 = Non-blanchable erythema on intact skin 2 = Partial thickness skin loss involving epidermis &/or dermis 3 = Full thickness skin loss involving damage or necrosis of subcutaneous tissue; may extend down to but not through underlying fascia; &/or mixed partial & full thickness &/or tissue layers obscured by granulation tissue 4 = Obscured by necrosis 5 = Full thickness skin loss with extensive destruction, tissue necrosis or damage to muscle, bone or supporting structures			
<b>3. Edges</b>	1 = Indistinct, diffuse, none clearly visible 2 = Distinct, outline clearly visible, attached, even with wound base 3 = Well-defined, not attached to wound base 4 = Well-defined, not attached to base, rolled under, thickened 5 = Well-defined, fibrotic, scarred or hyperkeratotic			
<b>4. Under-mining</b>	1 = None present 2 =Undermining < 2 cm in any area 3 = Undermining 2-4 cm involving < 50% wound margins 4 = Undermining 2-4 cm involving > 50% wound margins 5 = Undermining > 4 cm or Tunneling in any area			
<b>5. Necrotic Tissue Type</b>	1 = None visible 2 = White/grey non-viable tissue &/or non-adherent yellow slough 3 = Loosely adherent yellow slough 4 = Adherent, soft, black eschar 5 = Firmly adherent, hard, black eschar			
<b>6. Necrotic Tissue Amount</b>	1 = None visible 2 = < 25% of wound bed covered 3 = 25% to 50% of wound covered 4 = > 50% and < 75% of wound covered 5 = 75% to 100% of wound covered			
<b>7. Exudate Type</b>	1 = None			

Item	Assessment	Date Score	Date Score	Date Score
	2 = Bloody 3 = Serosanguineous: thin, watery, pale red/pink 4 = Serous: thin, watery, clear 5 = Purulent: thin or thick, opaque, tan/yellow, with or without odor			
<b>8. Exudate Amount</b>	1 = None, dry wound 2 = Scant, wound moist but no observable exudate 3 = Small 4 = Moderate 5 = Large			
<b>9. Skin Color Surrounding Wound</b>	1 = Pink or normal for ethnic group 2 = Bright red &/or blanches to touch 3 = White or grey pallor or hypopigmented 4 = Dark red or purple &/or non-blanchable 5 = Black or hyperpigmented			
<b>10. Peripheral Tissue Edema</b>	1 = No swelling or edema 2 = Non-pitting edema extends <4 cm around wound 3 = Non-pitting edema extends ≥4 cm around wound 4 = Pitting edema extends < 4 cm around wound 5 = Crepitus and/or pitting edema extends >4 cm around wound			
<b>11. Peripheral Tissue Induration</b>	1 = None present 2 = Induration, < 2 cm around wound 3 = Induration 2-4 cm extending < 50% around wound 4 = Induration 2-4 cm extending ≥ 50% around wound 5 = Induration > 4 cm in any area around wound			
<b>12. Granulation Tissue</b>	1 = Skin intact or partial thickness wound 2 = Bright, beefy red; 75% to 100% of wound filled &/or tissue overgrowth 3 = Bright, beefy red; < 75% & > 25% of wound filled 4 = Pink, &/or dull, dusky red &/or fills ≤25% of wound 5 = No granulation tissue present			
<b>13. Epithelialization</b>	1 = 100% wound covered, surface intact 2 = 75% to <100% wound covered &/or epithelial tissue extends >0.5cm into wound bed 3 = 50% to <75% wound covered &/or epithelial tissue extends to <0.5cm into wound bed 4 = 25% to < 50% wound covered 5 = < 25% wound covered			
<b>TOTAL SCORE</b>				
<b>SIGNATURE</b>				



Plot the total score on the Wound Status Continuum by putting an "X" on the line and the date beneath the line. Plot multiple scores with their dates to see-at-a-glance regeneration or degeneration of the wound.

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- Hari ke-2

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	Edges	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	2	3	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	3
6	Necrotic tissue amount	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	TOTAL SCORE	26	27	26	26	26	26	26	26	26	26	26	26	27	26	26	26	26	26	26	27

- Hari ke-3

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	Edges	3	3	3	3	3	2	3	2	3	2	2	3	3	3	2	3	3	3	3	3
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	2	3	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	3
6	Necrotic tissue amount	5	5	5	5	4	5	5	5	5	5	5	5	5	5	4	5	4	5	5	5
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	TOTAL SCORE	26	27	26	26	25	25	26	25	26	25	25	26	27	26	24	26	25	26	26	27

- Hari ke-4

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	Edges	3	3	3	3	3	2	2	3	2	2	2	2	2	2	2	3	2	3	3	3
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	2	3	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	3
6	Necrotic tissue amount	5	5	5	5	4	4	5	4	4	4	4	4	4	4	3	4	3	4	4	4
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	TOTAL SCORE	26	27	26	26	25	24	25	25	24	24	24	24	25	24	23	25	23	25	25	26

- Hari ke-5

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	Edges	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	2	3	2	2	2	2	3	2	2	2	2	2	3	2	2	2	2	2	2	2
6	Necrotic tissue amount	4	4	4	4	3	3	4	3	3	3	3	3	3	3	2	3	2	3	3	3
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	1	1	2	1	2	1	1	1	2	1	1	2	2	1	1	1	2	1	1	1
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	5	5	5	5	5	5	5	4	5	4	5	4	5	5	4	4	4	5	5	4
	TOTAL SCORE	24	25	25	24	24	22	24	21	23	21	22	22	24	22	20	22	21	23	23	22

- Hari ke-6

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	2	2	2	2	2	2	2	1	2	1	2	2	2	2	2	2	2	2	2	2
3	Edges	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	2	2	2	2	2	2	3	1	2	1	2	2	2	2	2	2	2	3	3	3
6	Necrotic tissue amount	4	3	2	3	3	2	3	1	2	1	2	3	2	3	2	2	2	3	3	3
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	1	1	2	1	2	1	1	1	2	1	1	2	2	1	1	1	2	1	1	1
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	5	4	4	5	5	4	4	4	4	3	4	3	4	4	3	3	3	4	4	3
	TOTAL SCORE	24	21	21	22	24	20	22	17	21	16	20	21	21	21	19	19	20	22	22	21

- Hari ke-7

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
3	Edges	1	2	2	1	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
6	Necrotic tissue amount	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	3	2	3
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	4	4	4	5	5	3	3	3	3	2	4	3	4	3	2	3	3	4	4	3
	TOTAL SCORE	19	20	20	17	19	16	16	15	15	15	20	19	20	19	18	19	19	21	20	20

- Hari ke-8

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	1	2	2	2	2	1	1	1	1	1	2	2	2	2	1	2	1	2	1	1
3	Edges	1	2	2	2	2	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	1	2	2	2	2	1	1	1	1	1	2	2	2	2	1	2	1	2	1	1
6	Necrotic tissue amount	1	2	2	2	2	1	1	1	1	1	2	2	2	2	1	2	1	2	1	1
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	3	4	3	4	4	3	3	2	2	2	3	3	3	3	3	2	2	4	4	3
	TOTAL SCORE	15	20	19	20	20	15	15	14	15	14	19	19	19	19	15	17	14	19	16	15

- Hari ke-9

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Edges	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Necrotic tissue amount	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	2	3	3	3	3	1	1	2	1	2	3	2	3	3	2	2	2	3	3	3
	TOTAL SCORE	14	18	20	19	16	13	13	14	13	14	15	14	15	15	14	14	14	15	15	15

- Hari ke-10

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Edges	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Necrotic tissue amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	2	2	2	2	2	1	1	1	1	1	1	1	2	1	1	1	1	3	1	1
	TOTAL SCORE	14	15	14	15	15	13	13	13	13	13	13	13	14	13	13	13	13	15	13	13

- Hari ke-11

NO	ITEM	GROUP 1					GROUP 2					GROUP 3					GROUP 4				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1	Size	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Depth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Edges	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Undermining	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Necrotic tissue type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Necrotic tissue amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Exudate type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Exudate amount	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Skin color surrounding wound	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Peripheral tissue edema	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Peripheral tissue induration	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Ganulation tissue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Epithelization	2	2	1	1	2	1	1	1	1	1	1	1	2	1	2	1	1	2	1	1
	TOTAL SCORE	14	14	13	13	15	13	13	13	13	13	13	13	14	13	14	13	13	14	13	13







## Lampiran 5. Data SPSS

### Explore

### Group

Case Summaries

Group		H1	H2	H3	H4	H5
Group 1	N	5	5	5	5	5
	Mean	26.20	26.20	26.00	26.00	24.40
	Std. Deviation	.447	.447	.707	.707	.548
	Median	26.00	26.00	26.00	26.00	24.00
	Minimum	26	26	25	25	24
	Maximum	27	27	27	27	25
Group 2	N	5	5	5	5	5
	Mean	26.00	26.00	25.40	24.40	22.20
	Std. Deviation	.000	.000	.548	.548	1.304
	Median	26.00	26.00	25.00	24.00	22.00
	Minimum	26	26	25	24	21
	Maximum	26	26	26	25	24
Group 3	N	5	5	5	5	5
	Mean	26.20	26.20	25.60	24.00	22.00
	Std. Deviation	.447	.447	1.140	.707	1.414
	Median	26.00	26.00	26.00	24.00	22.00
	Minimum	26	26	24	23	20
	Maximum	27	27	27	25	24
Group 4	N	5	5	5	5	5
	Mean	26.20	26.20	26.00	24.80	22.20
	Std. Deviation	.447	.447	.707	1.095	.837
	Median	26.00	26.00	26.00	25.00	22.00
	Minimum	26	26	25	23	21
	Maximum	27	27	27	26	23
Total	N	20	20	20	20	20
	Mean	26.15	26.15	25.75	24.80	22.70
	Std. Deviation	.366	.366	.786	1.056	1.418
	Median	26.00	26.00	26.00	25.00	22.50
	Minimum	26	26	24	23	20
	Maximum	27	27	27	27	25

**Case Summaries**

Group		H6	H7	H8	H9	H10
Group 1	N	5	5	5	5	5
	Mean	22.40	19.00	18.80	17.40	14.60
	Std. Deviation	1.517	1.225	2.168	2.408	.548
	Median	22.00	19.00	20.00	18.00	15.00
	Minimum	21	17	15	14	14
	Maximum	24	20	20	20	15
Group 2	N	5	5	5	5	5
	Mean	19.20	15.40	14.60	13.40	13.00
	Std. Deviation	2.588	.548	.548	.548	.000
	Median	20.00	15.00	15.00	13.00	13.00
	Minimum	16	15	14	13	13
	Maximum	22	16	15	14	13
Group 3	N	5	5	5	5	5
	Mean	20.40	19.20	18.20	14.60	13.20
	Std. Deviation	.894	.837	1.789	.548	.447
	Median	21.00	19.00	19.00	15.00	13.00
	Minimum	19	18	15	14	13
	Maximum	21	20	19	15	14
Group 4	N	5	5	5	5	5
	Mean	20.80	19.80	16.20	14.60	13.40
	Std. Deviation	1.304	.837	1.924	.548	.894
	Median	21.00	20.00	16.00	15.00	13.00
	Minimum	19	19	14	14	13
	Maximum	22	21	19	15	15
Total	N	20	20	20	20	20
	Mean	20.70	18.35	16.95	15.00	13.55
	Std. Deviation	1.949	1.954	2.328	1.919	.826
	Median	21.00	19.00	16.50	14.50	13.00
	Minimum	16	15	14	13	13
	Maximum	24	21	20	20	15

**Case Summaries**

Group		H11	H12	H13	H14
Group 1	N	5	5	5	5
	Mean	13.80	13.40	13.40	13.40
	Std. Deviation	.837	.894	.894	.894
	Median	14.00	13.00	13.00	13.00
	Minimum	13	13	13	13
	Maximum	15	15	15	15
Group 2	N	5	5	5	5
	Mean	13.00	13.00	13.00	13.00
	Std. Deviation	.000	.000	.000	.000
	Median	13.00	13.00	13.00	13.00
	Minimum	13	13	13	13
	Maximum	13	13	13	13
Group 3	N	5	5	5	5
	Mean	13.40	13.00	13.00	13.00
	Std. Deviation	.548	.000	.000	.000
	Median	13.00	13.00	13.00	13.00
	Minimum	13	13	13	13
	Maximum	14	13	13	13
Group 4	N	5	5	5	5
	Mean	13.20	13.00	13.00	13.00
	Std. Deviation	.447	.000	.000	.000
	Median	13.00	13.00	13.00	13.00
	Minimum	13	13	13	13
	Maximum	14	13	13	13
Total	N	20	20	20	20
	Mean	13.35	13.10	13.10	13.10
	Std. Deviation	.587	.447	.447	.447
	Median	13.00	13.00	13.00	13.00
	Minimum	13	13	13	13
	Maximum	15	15	15	15

Tests of Normality<sup>b,c,d,e,f,g,h,i,j,k,l,m,n</sup>

Group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
H1	Group 1	.473	5	.001	.552	5	.000
	Group 3	.473	5	.001	.552	5	.000
	Group 4	.473	5	.001	.552	5	.000
H2	Group 1	.473	5	.001	.552	5	.000
	Group 3	.473	5	.001	.552	5	.000
	Group 4	.473	5	.001	.552	5	.000
H3	Group 1	.300	5	.161	.883	5	.325
	Group 2	.367	5	.026	.684	5	.006
	Group 3	.237	5	.200*	.961	5	.814
	Group 4	.300	5	.161	.883	5	.325
H4	Group 1	.300	5	.161	.883	5	.325
	Group 2	.367	5	.026	.684	5	.006
	Group 3	.300	5	.161	.883	5	.325
	Group 4	.372	5	.022	.828	5	.135
H5	Group 1	.367	5	.026	.684	5	.006
	Group 2	.221	5	.200*	.902	5	.421
	Group 3	.300	5	.161	.883	5	.325
	Group 4	.231	5	.200*	.881	5	.314
H6	Group 1	.254	5	.200*	.803	5	.086
	Group 2	.221	5	.200*	.915	5	.501
	Group 3	.349	5	.046	.771	5	.046
	Group 4	.221	5	.200*	.902	5	.421
H7	Group 1	.300	5	.161	.833	5	.146
	Group 2	.367	5	.026	.684	5	.006
	Group 3	.231	5	.200*	.881	5	.314
	Group 4	.231	5	.200*	.881	5	.314
H8	Group 1	.337	5	.066	.676	5	.005
	Group 2	.367	5	.026	.684	5	.006
	Group 3	.473	5	.001	.552	5	.000
	Group 4	.141	5	.200*	.979	5	.928
H9	Group 1	.198	5	.200*	.957	5	.787
	Group 2	.367	5	.026	.684	5	.006
	Group 3	.367	5	.026	.684	5	.006
	Group 4	.367	5	.026	.684	5	.006
H10	Group 1	.367	5	.026	.684	5	.006
	Group 3	.473	5	.001	.552	5	.000
	Group 4	.473	5	.001	.552	5	.000
H11	Group 1	.231	5	.200*	.881	5	.314
	Group 3	.367	5	.026	.684	5	.006
	Group 4	.473	5	.001	.552	5	.000
H12	Group 1	.473	5	.001	.552	5	.000
H13	Group 1	.473	5	.001	.552	5	.000
H14	Group 1	.473	5	.001	.552	5	.000

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

a. Lilliefors Significance Correction

b. H1 is constant when Group = Group 2. It has been omitted.

c. H2 is constant when Group = Group 2. It has been omitted.

d. H10 is constant when Group = Group 2. It has been omitted.

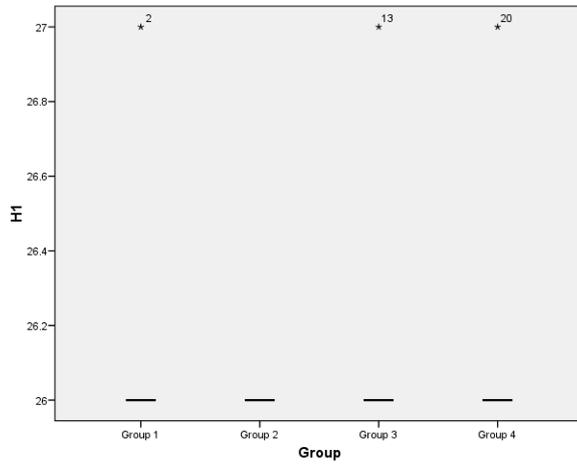
e. H11 is constant when Group = Group 2. It has been omitted.

f. H12 is constant when Group = Group 2. It has been omitted.

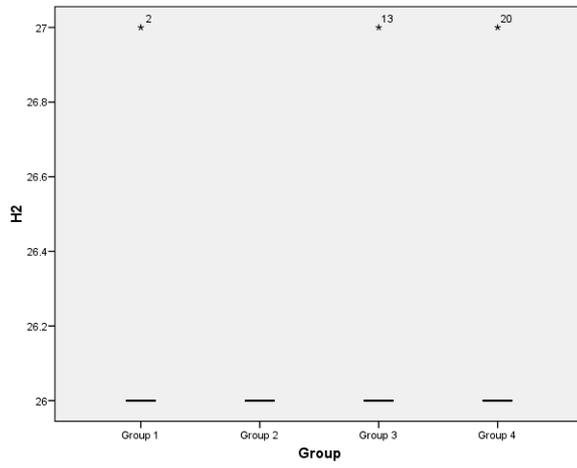
g. H12 is constant when Group = Group 3. It has been omitted.

h. H13 is constant when Group = Group 2. It has been omitted.

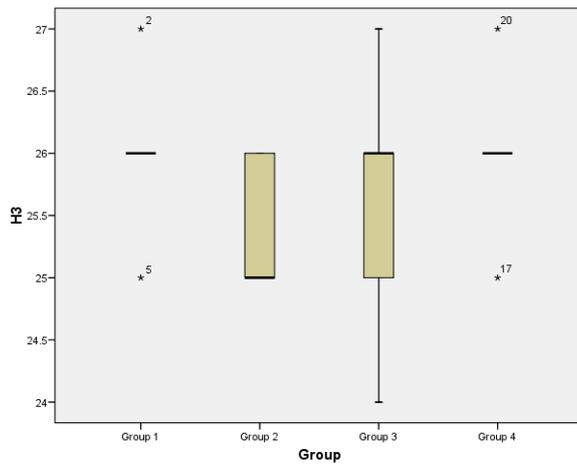
# H1



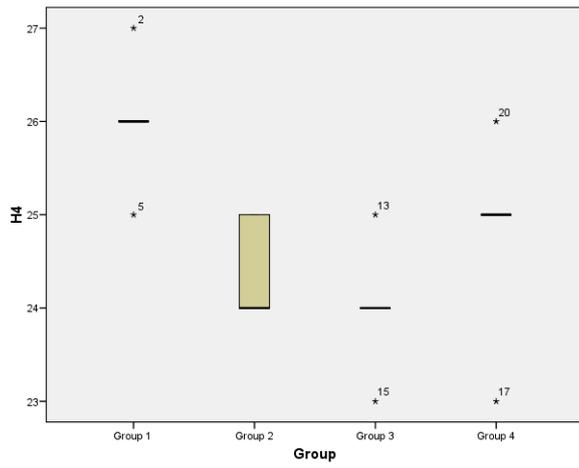
# H2



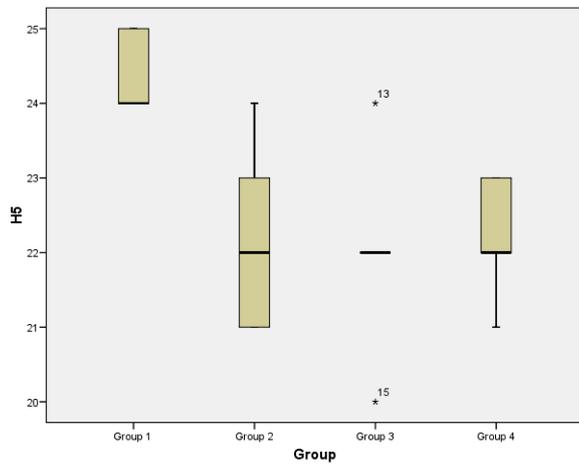
# H3



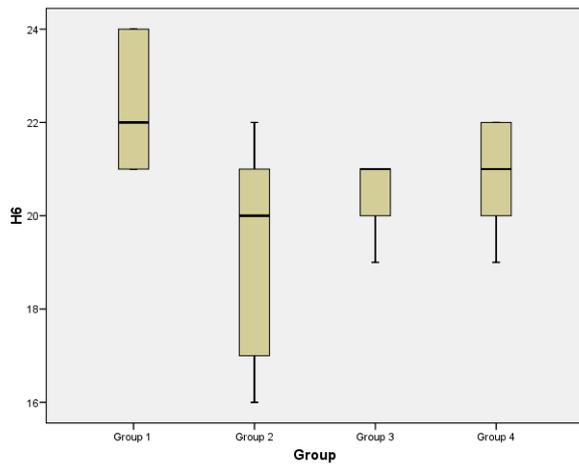
# H4



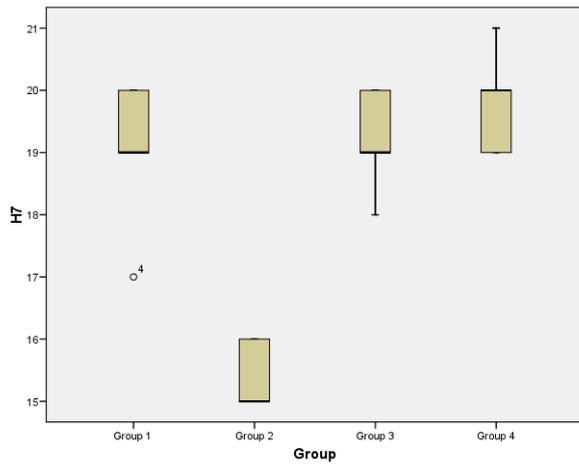
### H5



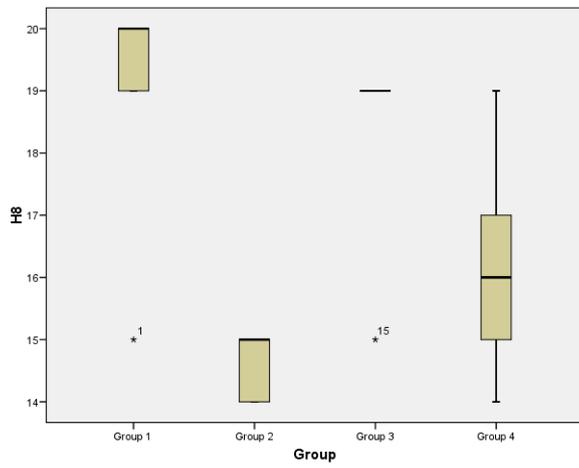
### H6



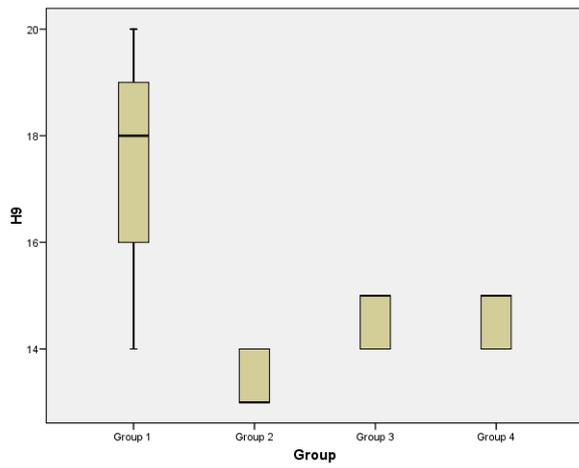
### H7



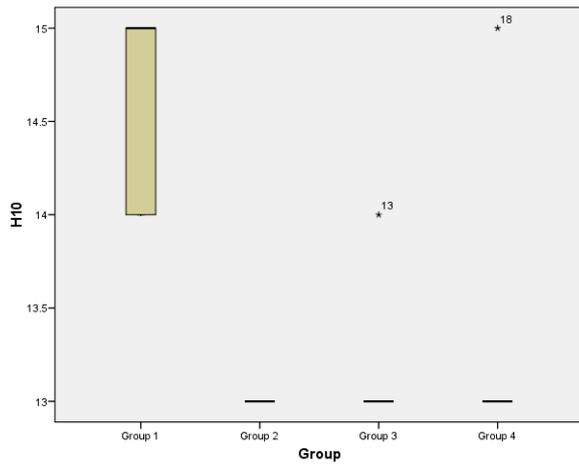
### H8



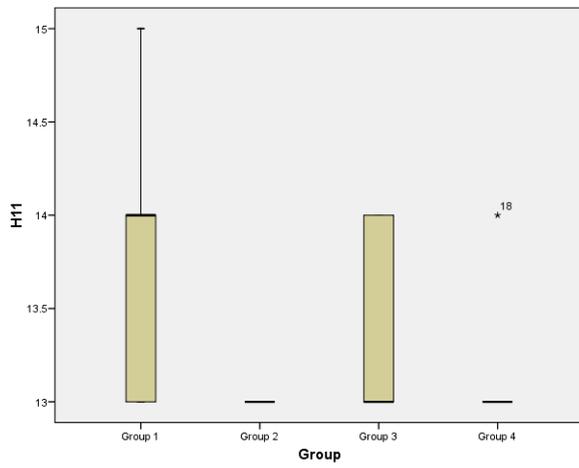
### H9



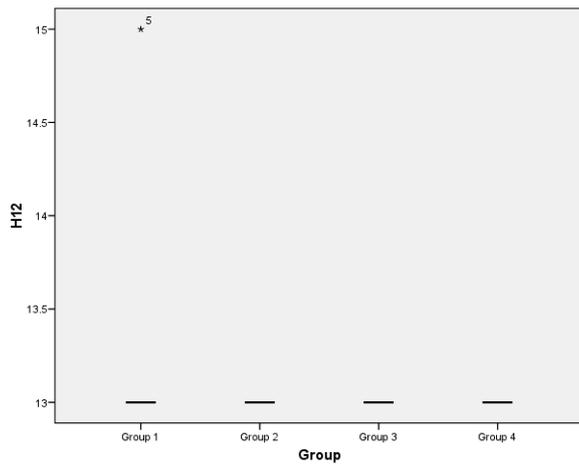
### H10



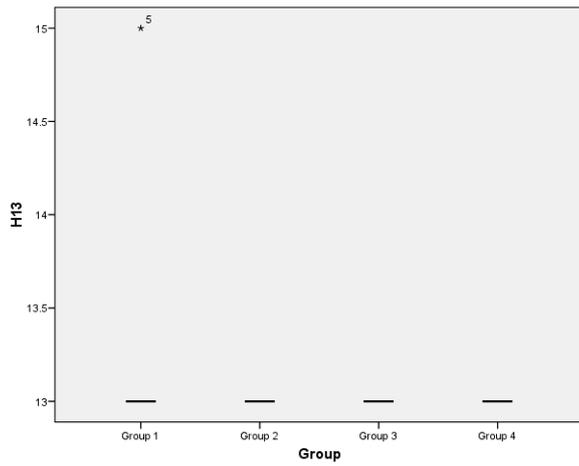
### H11



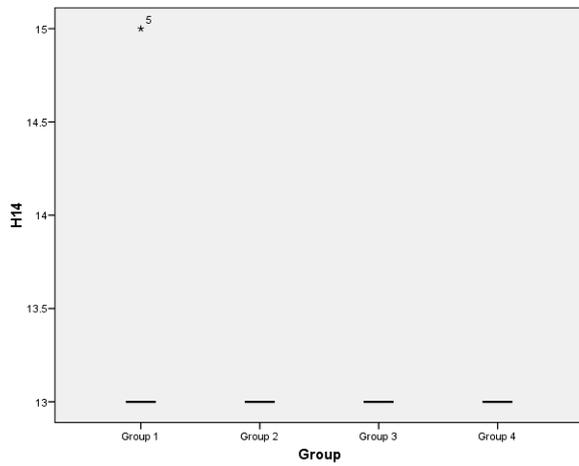
### H12



### H13



## H14



### Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
H1	2.370	3	16	.109
H2	2.370	3	16	.109
H3	1.119	3	16	.371
H4	.394	3	16	.759
H5	.653	3	16	.593
H6	4.708	3	16	.015
H7	.314	3	16	.815
H8	1.115	3	16	.372
H9	8.443	3	16	.001
H10	4.014	3	16	.026
H11	5.490	3	16	.009
H12	7.111	3	16	.003
H13	7.111	3	16	.003
H14	7.111	3	16	.003

## NPar Tests

## Kruskal-Wallis Test

Test Statistics<sup>a,b</sup>

	Chi-Square	df	Asymp. Sig.
H1	1.118	3	.773
H2	1.118	3	.773
H3	2.359	3	.501
H4	10.400	3	.015
H5	9.548	3	.023
H6	5.933	3	.115
H7	12.093	3	.007
H8	10.365	3	.016
H9	11.548	3	.009
H10	12.146	3	.007
H11	4.831	3	.185
H12	3.000	3	.392
H13	3.000	3	.392
H14	3.000	3	.392

a. Kruskal Wallis Test

b. Grouping Variable: Group

## NPar Tests

### Mann-Whitney Test

Ranks

	Group	N	Mean Rank	Sum of Ranks
H4	Group 1	5	7.80	39.00
	Group 2	5	3.20	16.00
	Total	10		
H5	Group 1	5	7.70	38.50
	Group 2	5	3.30	16.50
	Total	10		
H7	Group 1	5	8.00	40.00
	Group 2	5	3.00	15.00
	Total	10		
H8	Group 1	5	7.70	38.50
	Group 2	5	3.30	16.50
	Total	10		
H9	Group 1	5	7.80	39.00
	Group 2	5	3.20	16.00
	Total	10		
H10	Group 1	5	8.00	40.00
	Group 2	5	3.00	15.00
	Total	10		

Test Statistics<sup>b</sup>

	H4	H5	H7	H8	H9	H10
Mann-Whitney U	1.000	1.500	.000	1.500	1.000	.000
Wilcoxon W	16.000	16.500	15.000	16.500	16.000	15.000
Z	-2.495	-2.386	-2.668	-2.410	-2.463	-2.835
Asymp. Sig. (2-tailed)	.013	.017	.008	.016	.014	.005
Exact Sig. [2*(1-tailed Sig.)]	.016 <sup>a</sup>	.016 <sup>a</sup>	.008 <sup>a</sup>	.016 <sup>a</sup>	.016 <sup>a</sup>	.008 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Group

## NPar Tests

### Mann-Whitney Test

Ranks

	Group	N	Mean Rank	Sum of Ranks
H4	Group 1	5	7.90	39.50
	Group 3	5	3.10	15.50
	Total	10		
H5	Group 1	5	7.70	38.50
	Group 3	5	3.30	16.50
	Total	10		
H7	Group 1	5	5.40	27.00
	Group 3	5	5.60	28.00
	Total	10		
H8	Group 1	5	6.70	33.50
	Group 3	5	4.30	21.50
	Total	10		
H9	Group 1	5	7.20	36.00
	Group 3	5	3.80	19.00
	Total	10		
H10	Group 1	5	7.80	39.00
	Group 3	5	3.20	16.00
	Total	10		

Test Statistics<sup>b</sup>

	H4	H5	H7	H8	H9	H10
Mann-Whitney U	.500	1.500	12.000	6.500	4.000	1.000
Wilcoxon W	15.500	16.500	27.000	21.500	19.000	16.000
Z	-2.578	-2.410	-.111	-1.361	-1.820	-2.545
Asymp. Sig. (2-tailed)	.010	.016	.911	.174	.069	.011
Exact Sig. [2*(1-tailed Sig.)]	.008 <sup>a</sup>	.016 <sup>a</sup>	1.000 <sup>a</sup>	.222 <sup>a</sup>	.095 <sup>a</sup>	.016 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Group

## NPar Tests

### Mann-Whitney Test

Ranks

	Group	N	Mean Rank	Sum of Ranks
H4	Group 1	5	7.20	36.00
	Group 4	5	3.80	19.00
	Total	10		
H5	Group 1	5	8.00	40.00
	Group 4	5	3.00	15.00
	Total	10		
H7	Group 1	5	4.60	23.00
	Group 4	5	6.40	32.00
	Total	10		
H8	Group 1	5	7.20	36.00
	Group 4	5	3.80	19.00
	Total	10		
H9	Group 1	5	7.20	36.00
	Group 4	5	3.80	19.00
	Total	10		
H10	Group 1	5	7.30	36.50
	Group 4	5	3.70	18.50
	Total	10		

Test Statistics<sup>b</sup>

	H4	H5	H7	H8	H9	H10
Mann-Whitney U	4.000	.000	8.000	4.000	4.000	3.500
Wilcoxon W	19.000	15.000	23.000	19.000	19.000	18.500
Z	-1.894	-2.668	-1.003	-1.809	-1.820	-2.012
Asymp. Sig. (2-tailed)	.058	.008	.316	.070	.069	.044
Exact Sig. [2*(1-tailed Sig.)]	.095 <sup>a</sup>	.008 <sup>a</sup>	.421 <sup>a</sup>	.095 <sup>a</sup>	.095 <sup>a</sup>	.056 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Group

## NPar Tests

### Mann-Whitney Test

Ranks

	Group	N	Mean Rank	Sum of Ranks
H4	Group 2	5	6.30	31.50
	Group 3	5	4.70	23.50
	Total	10		
H5	Group 2	5	5.60	28.00
	Group 3	5	5.40	27.00
	Total	10		
H7	Group 2	5	3.00	15.00
	Group 3	5	8.00	40.00
	Total	10		
H8	Group 2	5	3.30	16.50
	Group 3	5	7.70	38.50
	Total	10		
H9	Group 2	5	3.40	17.00
	Group 3	5	7.60	38.00
	Total	10		
H10	Group 2	5	5.00	25.00
	Group 3	5	6.00	30.00
	Total	10		

Test Statistics<sup>b</sup>

	H4	H5	H7	H8	H9	H10
Mann-Whitney U	8.500	12.000	.000	1.500	2.000	10.000
Wilcoxon W	23.500	27.000	15.000	16.500	17.000	25.000
Z	-.956	-.108	-2.668	-2.460	-2.324	-1.000
Asymp. Sig. (2-tailed)	.339	.914	.008	.014	.020	.317
Exact Sig. [2*(1-tailed Sig.)]	.421 <sup>a</sup>	1.000 <sup>a</sup>	.008 <sup>a</sup>	.016 <sup>a</sup>	.032 <sup>a</sup>	.690 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Group

## NPar Tests

### Mann-Whitney Test

Ranks

	Group	N	Mean Rank	Sum of Ranks
H4	Group 2	5	4.60	23.00
	Group 4	5	6.40	32.00
	Total	10		
H5	Group 2	5	5.40	27.00
	Group 4	5	5.60	28.00
	Total	10		
H7	Group 2	5	3.00	15.00
	Group 4	5	8.00	40.00
	Total	10		
H8	Group 2	5	4.10	20.50
	Group 4	5	6.90	34.50
	Total	10		
H9	Group 2	5	3.40	17.00
	Group 4	5	7.60	38.00
	Total	10		
H10	Group 2	5	5.00	25.00
	Group 4	5	6.00	30.00
	Total	10		

Test Statistics<sup>b</sup>

	H4	H5	H7	H8	H9	H10
Mann-Whitney U	8.000	12.000	.000	5.500	2.000	10.000
Wilcoxon W	23.000	27.000	15.000	20.500	17.000	25.000
Z	-1.017	-.108	-2.668	-1.529	-2.324	-1.000
Asymp. Sig. (2-tailed)	.309	.914	.008	.126	.020	.317
Exact Sig. [2*(1-tailed Sig.)]	.421 <sup>a</sup>	1.000 <sup>a</sup>	.008 <sup>a</sup>	.151 <sup>a</sup>	.032 <sup>a</sup>	.690 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Group

## NPar Tests

### Mann-Whitney Test

Ranks

	Group	N	Mean Rank	Sum of Ranks
H4	Group 3	5	4.20	21.00
	Group 4	5	6.80	34.00
	Total	10		
H5	Group 3	5	5.20	26.00
	Group 4	5	5.80	29.00
	Total	10		
H7	Group 3	5	4.60	23.00
	Group 4	5	6.40	32.00
	Total	10		
H8	Group 3	5	6.90	34.50
	Group 4	5	4.10	20.50
	Total	10		
H9	Group 3	5	5.50	27.50
	Group 4	5	5.50	27.50
	Total	10		
H10	Group 3	5	5.40	27.00
	Group 4	5	5.60	28.00
	Total	10		

Test Statistics<sup>b</sup>

	H4	H5	H7	H8	H9	H10
Mann-Whitney U	6.000	11.000	8.000	5.500	12.500	12.000
Wilcoxon W	21.000	26.000	23.000	20.500	27.500	27.000
Z	-1.424	-.335	-1.003	-1.565	.000	-.149
Asymp. Sig. (2-tailed)	.154	.737	.316	.118	1.000	.881
Exact Sig. [2*(1-tailed Sig.)]	.222 <sup>a</sup>	.841 <sup>a</sup>	.421 <sup>a</sup>	.151 <sup>a</sup>	1.000 <sup>a</sup>	1.000 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Group

## Group 1

### NPar Tests

#### Friedman Test

##### Ranks

	Mean Rank
H1	12.70
H2	12.70
H3	12.30
H4	12.30
H5	9.80
H6	9.20
H7	7.20
H8	7.30
H9	6.30
H10	4.60
H11	3.40
H12	2.40
H13	2.40
H14	2.40

##### Test Statistics<sup>a</sup>

N	5
Chi-Square	63.644
df	13
Asymp. Sig.	.000

a. Friedman Test

## NPar Tests

### Wilcoxon Signed Ranks Test

Test Statistics<sup>c</sup>

	Z	Asymp. Sig. (2-tailed)
H2 - H1	.000 <sup>a</sup>	1.000
H3 - H2	-1.000 <sup>b</sup>	.317
H4 - H3	.000 <sup>a</sup>	1.000
H5 - H4	-2.070 <sup>b</sup>	.038
H6 - H5	-1.633 <sup>b</sup>	.102
H7 - H6	-2.070 <sup>b</sup>	.038
H8 - H7	-.184 <sup>b</sup>	.854
H9 - H8	-1.511 <sup>b</sup>	.131
H11 - H10	-1.633 <sup>b</sup>	.102
H12 - H11	-1.414 <sup>b</sup>	.157
H13 - H12	.000 <sup>a</sup>	1.000
H14 - H13	.000 <sup>a</sup>	1.000
H14 - H1	-2.060 <sup>b</sup>	.039

a. The sum of negative ranks equals the sum of positive ranks.

b. Based on positive ranks.

c. Wilcoxon Signed Ranks Test

## Group 2

### NPar Tests

#### Friedman Test

##### Ranks

	Mean Rank
H1	13.30
H2	13.30
H3	12.30
H4	11.10
H5	10.00
H6	9.00
H7	7.90
H8	6.90
H9	4.70
H10	3.30
H11	3.30
H12	3.30
H13	3.30
H14	3.30

##### Test Statistics<sup>a</sup>

N	5
Chi-Square	64.029
df	13
Asymp. Sig.	.000

a. Friedman Test

## NPar Tests

### Wilcoxon Signed Ranks Test

Test Statistics<sup>c</sup>

	Z	Asymp. Sig. (2-tailed)
H2 - H1	.000 <sup>a</sup>	1.000
H3 - H2	-1.732 <sup>b</sup>	.083
H4 - H3	-1.890 <sup>b</sup>	.059
H5 - H4	-2.032 <sup>b</sup>	.042
H6 - H5	-2.060 <sup>b</sup>	.039
H7 - H6	-2.032 <sup>b</sup>	.042
H8 - H7	-2.000 <sup>b</sup>	.046
H9 - H8	-1.732 <sup>b</sup>	.083
H11 - H10	.000 <sup>a</sup>	1.000
H12 - H11	.000 <sup>a</sup>	1.000
H13 - H12	.000 <sup>a</sup>	1.000
H14 - H13	.000 <sup>a</sup>	1.000
H14 - H1	-2.236 <sup>b</sup>	.025

a. The sum of negative ranks equals the sum of positive ranks.

b. Based on positive ranks.

c. Wilcoxon Signed Ranks Test

## Group 3

### NPar Tests

#### Friedman Test

Ranks

	Mean Rank
H1	13.20
H2	13.20
H3	12.60
H4	11.00
H5	10.00
H6	8.90
H7	7.90
H8	7.20
H9	5.90
H10	3.20
H11	3.80
H12	2.70
H13	2.70
H14	2.70

Test Statistics<sup>a</sup>

N	5
Chi-Square	64.214
df	13
Asymp. Sig.	.000

a. Friedman Test

## NPar Tests

### Wilcoxon Signed Ranks Test

Test Statistics<sup>d</sup>

	Z	Asymp. Sig. (2-tailed)
H2 - H1	.000 <sup>a</sup>	1.000
H3 - H2	-1.342 <sup>b</sup>	.180
H4 - H3	-2.070 <sup>b</sup>	.038
H5 - H4	-2.060 <sup>b</sup>	.039
H6 - H5	-2.060 <sup>b</sup>	.039
H7 - H6	-1.857 <sup>b</sup>	.063
H8 - H7	-1.633 <sup>b</sup>	.102
H9 - H8	-2.060 <sup>b</sup>	.039
H11 - H10	-1.000 <sup>c</sup>	.317
H12 - H11	-1.414 <sup>b</sup>	.157
H13 - H12	.000 <sup>a</sup>	1.000
H14 - H13	.000 <sup>a</sup>	1.000
H14 - H1	-2.121 <sup>b</sup>	.034

- a. The sum of negative ranks equals the sum of positive ranks.
- b. Based on positive ranks.
- c. Based on negative ranks.
- d. Wilcoxon Signed Ranks Test

## Group 4

### NPar Tests

#### Friedman Test

Ranks

	Mean Rank
H1	13.10
H2	13.10
H3	12.80
H4	11.00
H5	10.00
H6	8.90
H7	8.10
H8	6.80
H9	6.10
H10	3.50
H11	3.20
H12	2.80
H13	2.80
H14	2.80

Test Statistics<sup>a</sup>

N	5
Chi-Square	64.353
df	13
Asymp. Sig.	.000

a. Friedman Test

## NPar Tests

### Wilcoxon Signed Ranks Test

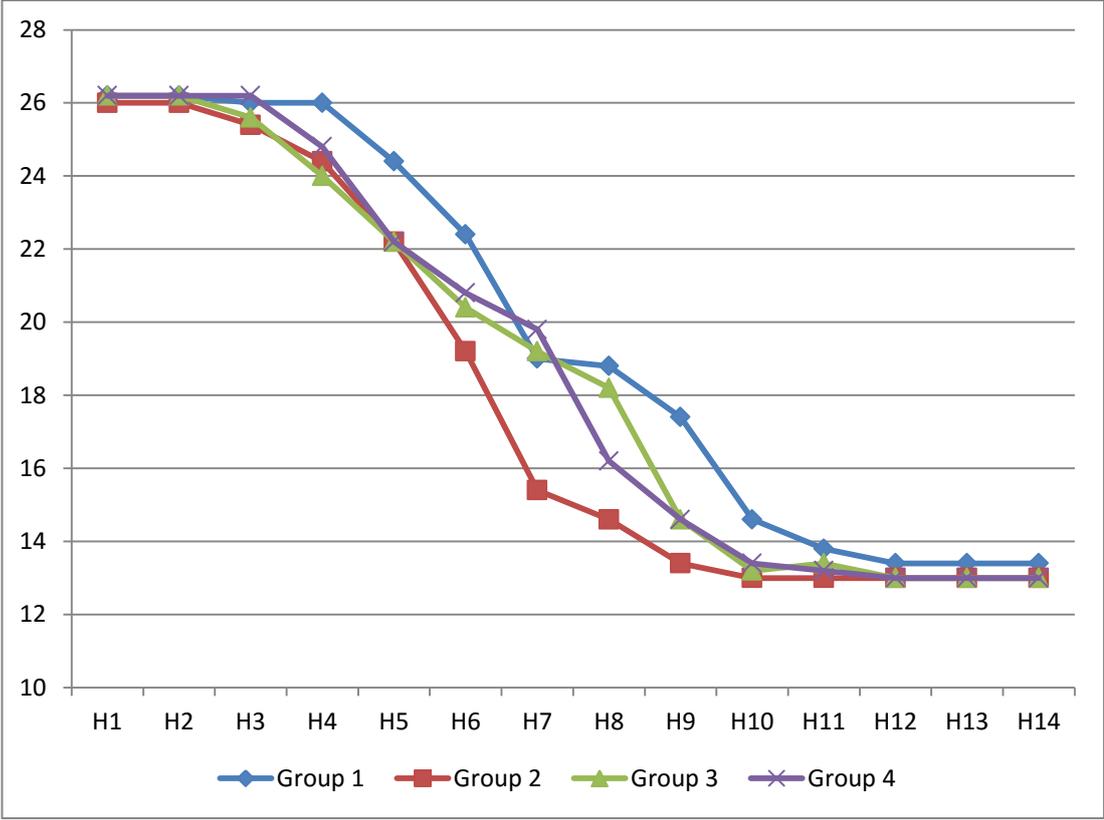
Test Statistics<sup>c</sup>

	Z	Asymp. Sig. (2-tailed)
H2 - H1	.000 <sup>a</sup>	1.000
H3 - H2	-1.000 <sup>b</sup>	.317
H4 - H3	-2.121 <sup>b</sup>	.034
H5 - H4	-2.060 <sup>b</sup>	.039
H6 - H5	-2.121 <sup>b</sup>	.034
H7 - H6	-1.890 <sup>b</sup>	.059
H8 - H7	-2.041 <sup>b</sup>	.041
H9 - H8	-1.604 <sup>b</sup>	.109
H11 - H10	-1.000 <sup>b</sup>	.317
H12 - H11	-1.000 <sup>b</sup>	.317
H13 - H12	.000 <sup>a</sup>	1.000
H14 - H13	.000 <sup>a</sup>	1.000
H14 - H1	-2.121 <sup>b</sup>	.034

a. The sum of negative ranks equals the sum of positive ranks.

b. Based on positive ranks.

c. Wilcoxon Signed Ranks Test



Lampiran 6. Dokumentasi Penelitian





## **Lampiran 7. Biodata Peneliti**

### **Identitas**

Nama : Zeta Aisyah Bestari  
NIM : 22010112110138  
Tempat, tanggal lahir : Semarang, 14 Juli 1994  
Jenis Kelamin : Perempuan  
Alamat : Jl. Stonen Utara I no.14 Semarang  
Nomor HP : 08995851584  
e-mail : zeta.aisyah14@gmail.com

### **Riwayat Pendidikan**

SD : SD Hj Isriati Baiturrahman lulus tahun 2006  
SMP : SMP Negeri 3 Semarang lulus tahun 2009  
SMA : SMA Negeri 1 Semarang lulus tahun 2012  
Fakultas Kedokteran Universitas Diponegoro masuk tahun 2012