BAB 7

KESIMPULAN DAN SARAN

7.1 Kesimpulan

Penelitian mengenai hubungan tinggi badan dengan tekanan darah pada mahasiswa Fakultas Kedokteran Universitas Katolik Widya Mandala Surabaya yang dilaksanakan pada tanggal 15 Agustus 2017 sampai 30 Agustus 2017 dapat diambil kesimpulan sebagai berikut:

1. Lima dari sepuluh responden penelitian memiliki tinggi badan 160-174 cm.
2. Empat dari enam responden penelitian memiliki tekanan darah normal.
3. Tujuh dari sepuluh responden penelitian memiliki tekanan darah sistolik <120 mmHg.
4. Delapan dari sepuluh responden penelitian memiliki tekanan darah diastolik <80 mmHg.
5. Terdapat hubungan yang bermakna antara tinggi badan dengan tekanan darah sistolik, tekanan darah diastolik, dan tekanan darah.

7.2 Saran

Berdasarkan penelitian yang telah dilakukan, ada beberapa saran antara lain:

1. Melakukan deteksi dini tekanan darah pada remaja maupun masa dewasa awal terutama mereka yang tinggi badan ≥ 175 cm.

2. Melakukan penelitian lebih lanjut hubungan tekanan darah dengan bagian dari tinggi badan yang lebih spesifik seperti panjang kaki atau panjang badan.

DAFTAR PUSTAKA

1. Kementerian Kesehatan RI. Hipertensi. Jakarta: Pusat Data dan Informasi Kementerian Kesehatan Republik Indonesia; 2014.
2. Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI. Riset Kesehatan Dasar 2013. Jakarta: Lembaga Penerbitan Badan Litbangkes; 2013.
3. Ejike CE. Variations in the prevalence of point (pre)hypertension in a Nigerian school-going adolescent population living in a semi-urban and an urban area. BMC Pediatrics. 2010; 10: 13.
4. Ejike CE. Blood pressure to height ratios as simple, sensitive and specific diagnostic tools for adolescent (pre)hypertension in Nigeria. Ital J Pediatr. 2011; 37:30.
5. National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents. The fourth report on the diagnosis, evaluation and treatment of high blood pressure in children and adolescents. Pediatrics. 2004.
6. Bernstein D. Nelson's Textbook of Pediatrics. 4 ed. Philadelphia: Saunders; 2004.
7. Cruickshank JK, Mzayek F, Liu L. Origins of the "black/white" difference in blood pressure roles of birth weight, postnatal growth, early blood pressure, and adolescent body size. Bogalusa Heart Study. 2005; 111:1932-1937.

8. Young HS. The correlation of blood pressure with height and weight in Korean adolescents aged 10-19 years. Korean J Pediatr. 2014.
9. Fujita Y, Kouda K. Relationship between height and blood pressure in Japanese schoolchildren. Pediatr Int. 2010.
10. Genovesi S, Antolini L, Giussani M, Pieruzzi F. Usefulness of waist circumference for the identification of childhood hypertension. J Hypertens. 2008; 26:1563-1570.
11. Beck CC, Lopes AS, Pitanga FJG. Anthropometric indicators as predictors of high blood pressure in adolescents. Arq Bras Cardiol. 2011; 96:126-133.
12. Lu Q, Ma CM, Yin FZ, Liu BW. How to simplify the diagnostic criteria of hypertension in adolescents. J Hum Hypertens. 2011; 25:159-163.
13. Sonbay CL. *Gambaran tingkat kecemasan, tekanan darah dan denyut nadi pada saat tidak ujian dan sesaat sebelum ujian pada mahasiswa Fakultas Kedokteran Universitas Katolik Widya Mandala Surabaya*. Surabaya: Universitas Katolik Widya Mandala Surabaya; 2016.
14. Maulana IB. *Hubungan aktivitas sedentari dengan lingkar pinggang dan indeks massa tubuh pada mahasiswa Fakultas Kedokteran UKWMS*. Surabaya: Universitas Katolik Widya Mandala Surabaya; 2016.
15. National Heart Foundation of Australia. Blood Pressure; 2016 [cited 2017 6 Feb]. Available from:

https://www.heartfoundation.org.au/images/uploads/publications/NAHU-Blood-pressure.pdf

16. Dorland WA. Kamus kedokteran Dorland. 31 Ed. Jakarta: EGC; 2012.
17. Pearce, Evelyne C. Anatomi dan Fisiologi untuk Paramedis. Jakarta: PT. Gramedia Pustaka Utama; 2010.
18. Joint National Committee. Seven report of the Joint National Committee on prevention, detection, evaluation, and treatment of High Blood Pressure. USA: US Department of Health and Human Service; 2004 [cited 2017 Mar 29]. Available from: https://www.nhlbi.nih.gov/files/docs/guidelines/jnc7full.pdf
19. Klabunde RE. Konsep fisiologi kardiovaskular. 2 Ed. Jakarta: EGC; 2015.
20. Behrman, Kliegman, Arvin. Ilmu Kesehatan Anak Nelson. 15 Ed. Jakarta: EGC; 2012
21. Guyton AC, John EH. Buku Ajar Fisiologi Kedokteran. 11 Ed. Jakarta: EGC; 2012.
22. Price SA, Wilson LM. Patofisiologi Konsep Klinis Proses Penyakit. 6 Ed. Jakarta: EGC; 2005.
23. Palmer A, Williams B. Tekanan Darah Tinggi. 2 Ed. Jakarta: Erlangga; 2007.
24. Hardman E, Stensel J. Physical activity and health: the evidence explained. 2 Ed). London: Routledge; 2009.
25. Guyton AC. Fisiologi Manusia dan Mekanisme Penyakit. 3 Ed. Jakarta: EGC; 1999.

26. Hodgson JM. Effects of tea and tea flavonoids on endothelial function and blood pressure a brief review; 2006 [cited 2017 9 April]. Available from: https://www.ncbi.nlm.nih.gov/pubmed/16922817
27. Larsson C. Coffee, Tea, Cocoa and Risk of Stroke; 2013 [cited 2017 9 April]. Available from: http://stroke.ahajournals.org/content/45/1/309.full
28. Mann L, Zipes P, Libby P, Braunwald E. Braunwald's Heart Disease: a text book of Cardiovascular medicine. 10 Ed. Philadelphia: Saunders Elsevier; 2015.
29. Izzo L, Sica A, Black R. Hypertension Primer: The Essentials of High Blood Pressure, Basic Science, Population Science, and Clinical Management. 4 Ed. Philadelphia: Lippincott Williams & Wilkins; 2008.
30. Ronny S, Fatimah S. Fisiologi Kardiovaskular: berbagai masalah keperawatan. Jakarta: EGC; 2010.
31. Tim Anatomi. Diktat Anatomi Manusia. Yogyakarta: Laboraturium Anatomi FIK Universitas Negeri Yogyakarta; 2011.
32. Hanom Y. *Hubungan* antara *tinggi badan*, *panjang lengan*, dan *kekuatan otot punggung terhadap jarak tolakan tolak peluru pada siswa kelas VII sekolah menengah pertama negeri 4 Ngaglik*. Yogyakarta: Universitas Negeri Yogyakarta; 2012 [cited 2017 28 Mar]. Available from: http://eprints.uny.ac.id/7743/3/BAB%20II%20-%2008601244105.pdf
33. Soetjiningsih. Tumbuh Kembang Anak. Jakarta: EGC; 2016.

34. Narendra M. Tumbuh Kembang Anak dan Remaja. Jakarta: Sagung Seto; 2002.
35. Jafarr N. Pertumbuhan Remaja; 2005 [cited 2017 29 Mar]. Available from: *repository.unhas.ac.id/.../b24%20pertumbuhan%20remaja.pdf?...1*
36. Badan Penelitian dan Pengembangan Kesehatan Departemen Kesehatan RI. Pedoman Pengukuran Dan Pemeriksaan. Jakarta: Badan Penelitian dan Pengembangan Kesehatan Departemen Kesehatan Republik Indonesia; 2007 [cited 2017 28 Mar]. Available from: http://www.riskesdas.litbang.depkes.go.id/download/PedomanPengukuran.pdf
37. National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents. The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents. Pediatrics. 2004.
38. Park MK, Menard SW, Schoolfield J. Oscillometric blood pressure standards for children. Pediatr Cardiol. 2005; 26(5):601-607.
39. Rosner B, Cook N, Portman R, Daniels S. Determination of blood pressure percentiles in normal-weight children: some methodological issues. Am J Epidemiol. 2008; 167(6):653-666.

40. Lauer RM, Burns TL, Clarke WR. Assessing children's blood pressure--considerations of age and body size: the Muscatine Study. Pediatrics. 1985; 75(6):1081-1090.
41. Sung RY, Choi KC, So HK, Nelson EA. Oscillometrically measured blood pressure in Hong Kong Chinese children and associations with anthropometric parameters. J Hypertens. 2008; 26(4):678-684.
42. Taksande A, Chaturvedi P, Vilhekar K, Jain M. Distribution of blood pressure in school going children in rural area of Wardha district, Maharashatra, India. Ann Pediatr Cardiol. 2008; 1(2): 101-106.
43. Arvedsen SK, Damgaard M, Norsk P. Body height and blood pressure regulation in humans during anti-orthostatic tilting. Am J Physiol Regul Integr Comp Physiol. 2012; 302(8):R984-989.
44. Blomqvist CG, Stone HL. Cardiovascular adjustments to gravitational stress. Am Physiol Soc. 1983.
45. Rowell LB. Human Cardiovascular Control. New York: Oxford University Press; 1993.
46. Voors AW, Harsha DW, Webber LS, Berenson GS. Relation of blood pressure to stature in healthy young adults. Am J Epidemiol. 1982; 115: 833–840.
47. Al-Majed, Sadek A. Prehypertension and hypertension in college students in Kuwait. 2012 [cited 2017 7 October]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3410173/

48. Black R, Elliott J. Hypertension: A complain to braunwald's heart disease. 2 Ed). Philadelphia: Saunders Elsevier; 2012.
49. Wenger KN, Peter C. Women & heart disease. 2 Ed. New York: Taylor and Francis Group; 2006.
50. Ghadhban F, Habib S. A study on the distribution of blood pressure measurements among university students. 2011 [cited 2017 7 October]. Available from: http://basmedcol.edu.iq/media/2014/01/A-study-on-the-distribution-of-blood-pressure-measurements-o.pdf