

BAB 6

KESIMPULAN DAN SARAN

Bab ini berisi kesimpulan hasil penelitian yang disesuaikan dengan tujuan penelitian, serta saran bagi praktik keperawatan, pendidikan keperawatan dan penelitian keperawatan selanjutnya.

6.1 Kesimpulan

Kesimpulan dalam penelitian ini adalah sebagai berikut:

1. Karakteristik pasien hipertensi, yaitu usia > 46 tahun (76 %), jenis kelamin perempuan (80 %), IMT gemuk berat (48 %), tidak merokok (56 %), kepatuhan minum obat rendah (76 %).
2. Tekanan darah pasien hipertensi persentase terbesar sistolik pada grade I sebesar 10 responden (40%) dan diastolik pada grade I 17 responden (68 %)
3. Tidak ada perbedaan signifikan tekanan darah sistolik dan diastolik sesudah diberikan *Isometric Handgrip Exercise* dengan nilai nilai $P = 0,258$ dan nilai $P = 0.086$ ($p < 0,05$)
4. Hasil analisa hubungan antara Usia, Jenis Kelamin, IMT, Status Merokok, Kepatuhan Minum Obat dan tekanan darah sistolik atau diastolik tidak bermakna ($p > 0,05$).

6.2 Saran

1. Bagi pasien

Penelitian ini diharapkan dapat digunakan sebagai bahan masukan sebagai dasar pertimbangan latihan non farmakologis bagi pasien hipertensi. Selain itu, diharapkan pasien dapat meningkatkan kepatuhan minum obat dengan cara rutin melakukan pengecekan tekanan darah ke Puskesmas sehingga pasien juga akan mendapatkan informasi yang lengkap terkait dengan hipertensi.

2. Bagi Puskesmas Kelurahan Binong

Hasil penelitian ini dapat dijadikan untuk memberikan intervensi dalam asuhan keperawatan pada pasien hipertensi. Serta berdasarkan temuan yang ada diadakan juga penyuluhan terkait dengan hipertensi maupun penyakit tidak menular lainnya yang rutin dilakukan oleh Puskesmas. Adanya program kunjungan rutin yang bergantian di wilayah binaan.

3. Bagi peneliti

Pengembangan penelitian lanjut diperlukan untuk memperdalam penelitian ini seperti adanya pengukuran kekuatan tangan dalam melakukan latihan *Isometric Handgrip Exercise* dengan menggunakan bola tenis serta faktor risiko yang dapat mempengaruhi *Isometric Handgrip Exercise* dan faktor risiko terkait hipertensi yang belum diteliti.

DAFTAR PUSTAKA

- Almatsier, S. (2006). *Penuntun Diet Edisi Baru*. PT Gramedia Pustaka Utama. Jakarta
- Alligood, M. R. (2014). *Pakar Teori Keperawatan dan Karya Mereka* (A. Hamid, Ed.). Elsevier.
- American Heart Association. (2013). *High Blood Pressure*. https://www.heart.org/idc/groups/heartpublic/@wcm/@sop/@smd/documents/downloadable/ucm_319587.pdf
- Arwani, A., & Sunarno, S. (2007). Analisis Perbedaan Hasil Pengukuran Tekanan Darah Antara Lengan Kanan Dengan Lengan Kiri Pada Penderita Hipertensi Di Rsud Dr. H. Abdul Moeloek Propinsi Lampung. *Nurse Media Journal of Nursing*, 1(2).
- Bae, E. J., Park, N. J., Sohn, H. S., & Kim, Y. H. (2019). Handgrip Strength and All-Cause Mortality in Middle-Aged and Older Koreans. *International journal of environmental research and public health*, 16(5), 740. doi:10.3390/ijerph16050740
- Baddeley-White, D. S., McGowan, C. L., Howden, R., Gordon, B. D., Kyberd, P., & Swaine, I. L. (2019). Blood pressure lowering effects of a novel isometric exercise device following a 4-week isometric handgrip intervention. *Open access journal of sports medicine*, 10, 89–98. <https://doi.org/10.2147/OAJSM.S193008>
- Badrov, M. B., Bartol, C. L., DiBartolomeo, M. A., Millar, P. J., McNevin, N. H., & McGowan, C. L. (2013). Effects of isometric handgrip training dose on resting blood pressure and resistance vessel endothelial function in normotensive women. *European journal of applied physiology*, 113(8), 2091-2100.
- Bentley, D. C., Nguyen, C. H., & Thomas, S. G. (2018). Resting blood pressure reductions following handgrip exercise training and the impact of age and sex: a systematic review and narrative synthesis. *Systematic reviews*, 7(1), 229. <https://doi.org/10.1186/s13643-018-0876-5>
- Black, J. M., & Hawks, J. H. (2014). *Keperawatan Medikal Bedah: Manajemen klinis untuk Hasil yang Diharapkan*. Edisi 8. Jakarta: Salemba Medika
- Bristol Public Health. (2010). *Health and Wellbeing Factsheet Smoking*. <http://www.bristol.gov.uk/>
- Brook, R. D., Appel, L. J., Rubenfire, M., Ogedegbe, G., Bisognano, J. D., Elliott, W. J., ... & Townsend, R. R. (2013). Beyond medications and diet: alternative

approaches to lowering blood pressure: a scientific statement from the American Heart Association. *Hypertension*, 61(6), 1360-1383.

- Buford, T. W. (2016). Hypertension and aging. *Ageing research reviews*, 26, 96-111.
- Carlson, D. J., Dieberg, G., McFarlane, J. R., & Smart, N. A. (2017). Isometric Handgrip Exercise Reduces 24hr Ambulatory Blood Pressure. *Circulation*, 136(suppl_1), A17175-A17175. Choi, H. M., Kim, H. C., & Kang, D. R. (2017). Sex differences in hypertension prevalence and control: analysis of the 2010-2014 Korea National Health and Nutrition Examination Survey. *PloS one*, 12(5), e0178334.
- Collier, S. R., Frechette, V., Sandberg, K., Schafer, P., Ji, H., Smulyan, H., & Fernhall, B. (2011). Sex differences in resting hemodynamics and arterial stiffness following 4 weeks of resistance versus aerobic exercise training in individuals with pre-hypertension to stage 1 hypertension. *Biology of sex differences*, 2(1), 1-7.
- CNN Indonesia.(2019). *Generasi Milenial Rentan Hipertensi*. <https://www.cnnindonesia.com/gaya-hidup/20190305001612-255-374516/generasi-milenial-rentan-hipertensi-pada-tanggal-21-februari-2019>.
- Damasari, Puspa Raras.(2016). *Ketaatan Terapi Respoden Hipertensi Usia 40-75 Tahun Menggunakan Instrumen Morisky di Kecamatan Ngemplak, Sleman, DIY*. https://repository.usd.ac.id/8542/2/138114106_full.pdf
- Das Gupta, R., Shabab Haider, S., Sutradhar, I., Hasan, M., Joshi, H., Rifat Haider, M., & Sarker, M. (2020). Gender differences in hypertension awareness, antihypertensive use and blood pressure control in Nepalese adults: Findings from a nationwide cross-sectional survey. *Journal of Biosocial Science*, 52(3), 412-438. doi:10.1017/S0021932019000531
- DeMarco, V. G., Aroor, A. R., & Sowers, J. R. (2014). The pathophysiology of hypertension in patients with obesity. *Nature Reviews Endocrinology*, 10(6), 364.
- Depkes RI.(2018). *Hipertensi Membunuh Diam-diam, Ketahui Tekanan Darah Anda*.<http://www.depkes.go.id/article/view/18051600004/hipertensi-membunuh-diam-diam-ketahui-tekanan-darah-anda.html> pada tanggal 5 Mei 2019.
- Depkes RI.(2018). *Potret Sehat Indonesia dari Riskesdas 2018*. <http://www.depkes.go.id/pdf.php?id=18110200003> pada tanggal 5 Mei 2019.

- Dipla, K., Nassis, G. P., & Vrabas, I. S. (2012). Blood Pressure Control at Rest and during Exercise in Obese Children and Adults. *Journal of Obesity*, 2012, 1–10. doi:10.1155/2012/147385
- ESC/ESH Guidelines for the management of arterial hypertension.(2018). *The Task Force for the management of arterial hypertension of the European Society of Cardiology (ESC) and the European Society of Hypertension (ESH)*. [online]https://www.portailvasculaire.fr/sites/default/files/docs/2018_esc_esh_guidelines_hta.pdf diakses pada 1 April 2019
- Garg, R., Malhotra, V., Kumar, A., Dhar, U., & Tripathi, Y. (2014). Effect of isometric handgrip exercise training on resting blood pressure in normal healthy adults. *Journal of clinical and diagnostic research : JCDR*, 8(9), BC08–BC10. <https://doi.org/10.7860/JCDR/2014/8908.4850>
- Ganong, William F & McPhee, Stephen J.(2012). *Patofisiologi Penyakit: Pengantar Menuju Kedokteran Klinis Edisi 5*. Jakarta: EGC
- Hardy, S. T., Loehr, L. R., Butler, K. R., Chakladar, S., Chang, P. P., Folsom, A. R., Heiss, G., MacLehose, R. F., Matsushita, K., & Avery, C. L. (2015). Reducing the Blood Pressure-Related Burden of Cardiovascular Disease: Impact of Achievable Improvements in Blood Pressure Prevention and Control. *Journal of the American Heart Association*, 4(10), e002276. <https://doi.org/10.1161/JAHA.115.002276>
- Hastono, S. P. (2017). *Analisis Data pada Bidang Kesehatan Edisi 1*. Depok: Rajawali Pers .
- Hall, J. E., do Carmo, J. M., da Silva, A. A., Wang, Z., & Hall, M. E. (2015). Obesity-induced hypertension: interaction of neurohumoral and renal mechanisms. *Circulation research*, 116(6), 991-1006.
- Hazwan, A., & Pinatih, G. N. I. (2017). Gambaran karakteristik penderita hipertensi dan tingkat kepatuhan minum obat di wilayah kerja puskesmas Kintamani I. *Intisari Sains Medis*, 8(2), 131.
- Huang, X. B., Chen, F., Dai, W., Song, L., Tu, J., Xu, J. B., ... & Wang, T. D. (2018). Prevalence and risk factors associated with hypertension in the Chinese Qiang population. *Clinical and Experimental Hypertension*, 40(5), 427-433.
- Health and Wellness Associates. (2016). *A Tennis Ball!*. <https://healthandwellnessassociates.co/2016/03/09/a-tennis-ball/>
- Huang, X., Tang, W.,Liu, Y., Hu, R.,Ouyang, L.,Liu, J.,Zhao,S. (2017). Prevalence of diabetes and unrecognized diabetes in hypertensive patients aged 40 to 79 years

in southwest China. *PLOS ONE*, 12(2), e0170250. doi:10.1371/journal.pone.0170250

Huether, Sue E; McCance, Kathryn L.(2017). *Buku Ajar Patofisiologi, edisi Indonesia keenam*, oleh Djoko Wahono Soeatmadji, Retty ratnawati & Hidayat Sujuti. Singapore : Elsevier

Ibekwe R. (2015). Modifiable Risk factors of Hypertension and Socio-demographic Profile in Oghara, Delta State; Prevalence and Correlates. *Annals of medical and health sciences research*, 5(1), 71–77. <https://doi.org/10.4103/2141-9248.149793>

Jena.Sunil Kumar, Purohit.Kanhu Charan (2017). *Smoking status and its effect on blood pressure: A study on medical students*. <http://www.cjhr.org/article.asp?issn=23483334;year=2017;volume=4;issue=1;page=14;epage=18;aulast=Jena> pada tanggal 29 Januari 2020.

Jin, Y.Z., Yan, S., & Yuan, W.X. (2017). Effect of isometric handgrip training on resting blood pressure in adults: a meta-analysis of randomized controlled trials. *The Journal of sports medicine and physical fitness*, 57 1-2, 154-160

Jiang, S. Z., Lu, W., Zong, X. F., Ruan, H. Y., & Liu, Y. (2016). Obesity and hypertension. *Experimental and therapeutic medicine*, 12(4), 2395–2399. doi:10.3892/etm.2016.3667.

Karthikkeyan, Kanmani.,Latha. L,Gokulnathan.V. (2020). Effects of Isometric Handgrip Exercise on Blood Pressure and its role in Identifying Hypertensive Risk Individuals. *International Journal of Contemporary Medical Research*, 7(2). https://www.ijcmr.com/uploads/7/7/4/6/77464738/ijcmr_2942.pdf

Khan, N. A., Rabkin, S. W., Zhao, Y., McAlister, F. A., Park, J. E., Guan, M., ... & Humphries, K. H. (2018). Effect of lowering diastolic pressure in patients with and without cardiovascular disease: analysis of the SPRINT (Systolic Blood Pressure Intervention Trial). *Hypertension*, 71(5), 840-847.

Kementerian Kesehatan Republik Indonesi. (2018). *Laporan Nasional Riskesdas 2018*.http://labmandat.litbang.depkes.go.id/images/download/laporan/RKD/2018/Laporan_Nasional_RKD2018_FINAL.pdf pada tanggal 16 Januari 2020.

Kementerian Kesehatan Republik Indonesia.(2017). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 5 Tahun 2017 Tentang Rencana Aksi Nasional Penanggulangan Penyakit Tidak Menular Tahun 2015-2019*. [https://dinkes.kedirikab.go.id/konten/uu/79950PMK_5_2017tentang Rencana_Aksi_Nasional_Penanggulangan_PTM_2015-2019_.pdf](https://dinkes.kedirikab.go.id/konten/uu/79950PMK_5_2017tentang_Rencana_Aksi_Nasional_Penanggulangan_PTM_2015-2019_.pdf) pada tanggal 17 Februari 2020

- Kementerian Kesehatan Republik Indonesia.(2018).*Epidemi Obesitas*.
http://p2ptm.kemkes.go.id/uploads/N2VaaXIxZGZwWFpEL1VlRFdQQ3ZRZz09/2018/02/FactSheet_Obesitas_Kit_Informasi_Obesitas.pdf
pada tanggal 12 Februari 2020
- Kementerian Kesehatan Republik Indonesia.(2019). *Hari Hipertensi Dunia 2019*.
<http://www.p2ptm.kemkes.go.id> pada tanggal 29 Januari 2020.
- Kementerian Kesehatan Republik Indonesia.(2019). *Hipertensi Penyakit Paling Banyak Diidap Masyarakat*.<http://www.depkes.go.id/article/view/19051700002/hipertensi-penyakit-paling-banyak-diidap-masyarakat.html>
pada tanggal 22 Agustus 2019.
- Kemenkes, R. I. (2017). Profil Penyakit Tidak Menular Tahun 2016. *Jakarta: Kementerian Kesehatan Republik Indonesia*.
- Kemenkes, R. I. (2018). Hasil utama RISKESDAS 2018. *Online*) http://www.depkes.go.id/resources/download/info-terkini/materi_rakorpop_2018/Hasil%20Riskesdas,202018.
- Kusyati, Eni., Yunani, Wahyuningsih, Retno Dyah., Fauziyah R, Nur., Hartana, Aswidiastoeti. (2012). *Ketrampilan & Prosedur Laboratorium Keperawatan Dasar*. Jakarta: EGC
- Lawrence, M. M., Cooley, I. D., Huet, Y. M., Arthur, S. T., & Howden, R. (2015). Factors influencing isometric exercise training-induced reductions in resting blood pressure. *Scandinavian journal of medicine & science in sports*, 25(2), 131-142.
- LeMone, Priscilla., Burke, Karen M., Bauldoff, Gerene alih bahasa, Nike Budhi Subekti editor bahasa Indonesia, Ayu Linda .(2015). *Buku ajar keperawatan medical bedah edisi 5*.Jakarta:EGC.
- Leone, A. (2012). How and why chemicals from tobacco smoke can induce a rise in blood pressure. *World J Pharmacol*, 1(1), 10-20.
- Leong D.P., Teo K.K., Rangarajan S., Kutty V.R., Lanas F., Hui C., Quanyong X., Zhenzhen Q., Jinhua T., Noorhassim I. Reference ranges of handgrip strength from 125,462 healthy adults in 21 countries: A prospective urban rural epidemiologic (PURE) study. *J. CachexiaSarcopenia Muscle*. 2016;7:535–546. doi: 10.1002/jcsm.12112
- Lewis, Sharon Mantik. (2011). *Medical surgical nursing*. 8th edition. St.Louis : Missouri. Mosby-Year Book, Inc

- Lewis, Sharon Mantik. (2017). *Medical surgical nursing*. 10th edition. St.Louis : Missouri. Mosby-Year Book, Inc
- Lily, Leonard.S (editor) & Harvard Medical School.(2016). *Pathofisiology of heart disease: a collaborative project of medical students sixth edition*. Philadelphia: Wolters Kluwer.
- Lu, Y., Lu, M., Dai, H., Yang, P., Smith-Gagen, J., Miao, R., Zhong, H., Chen, R., Liu, X., Huang, Z., & Yuan, H. (2015). Lifestyle and Risk of Hypertension: Follow-Up of a Young Pre-Hypertensive Cohort. *International journal of medical sciences*, 12(7), 605–612. <https://doi.org/10.7150/ijms.12446>
- Mcgowan, C. L., Levy, A. S., McCartney, N., & Macdonald, M. J. (2007). Isometric handgrip training does not improve flow-mediated dilation in subjects with normal blood pressure. *Clinical Science*, 112(7), 403–409. doi:10.1042/cs20060195
- Millar, P. J., McGowan, C. L., Cornelissen, V. A., Araujo, C. G., & Swaine, I. L. (2013). Evidence for the Role of Isometric Exercise Training in Reducing Blood Pressure: Potential Mechanisms and Future Directions. *Sports Medicine*, 44(3), 345–356. doi:10.1007/s40279-013-0118-x
- Millar, P. J., Paashuis, A., & McCartney, N. (2009). Isometric handgrip effects on hypertension. *Current Hypertension Reviews*, 5(1), 54-60.
- Ministry of Health New Zealand.(2015).*Definitions of smoking status*. <https://www.health.govt.nz/our-work/preventative-health-wellness/tobacco-control/tobacco-control-information-practitioners/definitions-smoking-status>
- Mollaoglu, M., Solmaz, G., & Mollaoglu, M. (2015). Adherence to therapy and quality of life in hypertensive patients. *Acta Clinica Croatica*, 54(4.), 438-443.
- Mortimer, J., & McKune, A. J. (2011). Effect of short-term isometric handgrip training on blood pressure in middle-aged females. *Cardiovascular journal of Africa*, 22(5), 257–260. <https://doi.org/10.5830/CVJA-2010-090>
- Muttaqin Arif. (2012). *Asuhan Keperawatan Klien dengan Gangguan Sistem Kardioavaskuler dan Hematologi*. Jakarta : Salemba Medika.
- Natsis, M., Antza, C., Doundoulakis, I., Stabouli, S., & Kotsis, V. (2019). Hypertension in obesity: novel insights. *Current Hypertension Reviews*, 15. doi:10.2174/1573402115666190415154603
- Nurhidayat, S., (2015). *Asuhan Keperawatan Pada Pasien Hipertensi*. Ponorogo: UNMUH Ponorogo

- Olack, B., Wabwire-Mangen, F., Smeeth, L., Montgomery, J. M., Kiwanuka, N., & Breiman, R. F. (2015). Risk factors of hypertension among adults aged 35–64 years living in an urban slum Nairobi, Kenya. *BMC Public Health*, *15*(1). doi:10.1186/s12889-015-2610-8
- Owen, A., Wiles, J., & Swaine, I. (2010). Effect of isometric exercise on resting blood pressure: a meta analysis. *Journal of human hypertension*, *24*(12), 796-800.
- P2PTM Kemenkes RI.(2019). *Yuk, Mengenal Apa itu Perokok Pasif?*. <http://www.p2ptm.kemkes.go.id/infographic/yuk-mengenal-apa-itu-perokok-pasif>
- Palimbong,Sarlina.Kurniasari, Maria Dyah. Kiha, Rani Refilda. (2018). *Keefektifan Diet Rendah Garam I Pada Makanan Biasa dan Lunak Terhadap Lama Kesembuhan Pasien Hipertensi*. https://www.researchgate.net/publication/326516860_Keefektifan_Diet_Rendah_Garam_I_Pada_Makanan_Biasa_Dan_Lunak_Terhadap_Lama_Kesembuhan_Pasien_Hipertensi pada tanggal 11 Februari 2020.
- Pankova, A., Kralikova, E., Fraser, K., Lajka, J., Svacina, S., & Matoulek, M. (2015). No difference in hypertension prevalence in smokers, former smokers and non-smokers after adjusting for body mass index and age: a cross-sectional study from the Czech Republic, 2010. *Tobacco induced diseases*, *13*(1), 24. <https://doi.org/10.1186/s12971-015-0049-4>
- Paresh, Sheena Shah., Greco, Theresia L., Rohr-Kirchgraber, Theresa. (2019). The Sex and Gender Influence on Hypertension. *Health Management Volume 19 - Issue 5, 2019*. <https://healthmanagement.org/c/healthmanagement/issue/115627>
- Parlindungan,Tua. Lukitasari, Arti. Mudatsir.(2016). Latihan Isometrik Bermanfaat Menurunkan Tekanan Darah Pada Penderita Hipertensi. <http://jurnal.unsyiah.ac.id/JIK/article/download/6321/5205> pada tanggal 22 Agustus 2019.
- Perhimpunan Dokter Spesialis Kardiovaskular Indonesia. (2011). Penyakit Paru Obstruktif Kronik: Pedoman Diagnosis & Penatalaksanaan Di Indonesia. <http://www.klikdpi.com/>
- Perhimpunan Dokter Spesialis Kardiovaskular Indonesia. (2015). *Pedoman tatalaksana hipertensi pada penyakit kardiovaskular (I)*. http://www.inaheart.org/upload/file/Pedoman_TataLaksana_hipertensi_pada_penyakit_Kardiovaskular_2015.pdf
- Peters, P. G., Alessio, H. M., Hagerman, A. E., Ashton, T., Nagy, S., & Wiley, R. L. (2006). Short-term isometric exercise reduces systolic blood pressure in

hypertensive adults: possible role of reactive oxygen species. *International journal of cardiology*, 110(2), 199-205.

Polit, D.F& Beck, C.T.(2012). *Nursing Research :Generating and Assessing Evidence for Nursing Practice 9th Edition*.Philadelphia: Lippincott, William & Wilkins.

Potter, P.A, Perry, A.G.(2009). *Buku Ajar Fundamental Keperawatan*. Jakarta : EGC

Pratiwi, R. I., & Perwitasari, M. (2017, May). Analisis Faktor-Faktor Yang Mempengaruhi Kepatuhan Pasien Hipertensi Dalam Penggunaan Obat Di RSUD Kardinah. In *Prosiding 2nd Seminar Nasional IPTEK Terapan (SENIT) 2017* (Vol. 2, No. 1, pp. 204-208).

Rahajeng.Ekowati, Riyadina.Woro. (2016). *Survival Rate Penyandang Hipertensi Dengan Konsumsi Natrium Rendah Terhadap Kejadian Stroke*. https://www.persagi.org/ejournal/index.php/Gizi_Indon/article/view/210/19 pada tanggal 29 Januari 2020.

Saladini, F., Benetti, E., Fania, C., Mos, L., Casiglia, E., & Palatini, P. (2016). Effects of smoking on central blood pressure and pressure amplification in hypertension of the young. *Vascular Medicine*, 21(5), 422-428.

Sartik, Tjekyan, R. S. ., & M.Zulkarnain. (2017). Faktor – Faktor Risiko dan Angka Kejadian Hipertensi pada Penduduk Palembang. *Jurnal Ilmu Kesehatan Masyarakat*, 8(3), 180-191. <https://doi.org/10.26553/jikm.2017.8.3.180-191>

Singh, J. N., Nguyen, T., & Dhamoon, A. S. (2019). Physiology, Blood Pressure Age Related Changes. In *StatPearls [Internet]*. StatPearls Publishing.

Singh, S., Shankar, R., & Singh, G. P. (2017). Prevalence and Associated Risk Factors of Hypertension: A Cross-Sectional Study in Urban Varanasi. *International journal of hypertension*, 2017, 5491838. doi:10.1155/2017/5491838.

Somani, Y. B., Baross, A. W., Brook, R. D., Milne, K. J., McGowan, C. L., and Swaine, I. L. (2017). Acute response to a 2-minute isometric exercise test predicts the blood pressure-lowering efficacy of isometric resistance training in young adults. *Am. J. Hypertens.* 31, 362–368. doi: 10.1093/ajh/hpx173

Somani, Y., Baross, A., Levy, P., Zinszer, K., Milne, K., Swaine, I., & McGowan, C. (2017). Reductions in ambulatory blood pressure in young normotensive men and women after isometric resistance training and its relationship with cardiovascular reactivity. *Blood Pressure Monitoring*, 22(1), 1–7. doi:10.1097/mbp.0000000000000222

Spruill, T. M., Butler, M. J., Thomas, S. J., Tajeu, G. S., Kalinowski, J., Castañeda, S. F., ... Shimbo, D. (2019). Association Between High Perceived Stress Over Time

and Incident Hypertension in Black Adults: Findings From the Jackson Heart Study. *Journal of the American Heart Association*, 8(21). doi:10.1161/jaha.119.012139

Sukarmin, Nurachmah, Elly, Gayatri, Dewi.(2013). *Penurunan Tekanan Darah Pada Pasien Hipertensi Melalui Brisk Walking Exercise*. <http://jki.ui.ac.id/index.php/jki/article/view/17> pada tanggal 22 Agustus 2019.

Supardi, Sudiby., Rustika.(2013). *Buku Ajar Metodologi Riset Keperawatan*. Jakarta: CV.Trans Info Media.

Supriyono, S. (2019). Analisis Faktor-Faktor yang Berhubungan Tekanan Darah Sistole pada Peserta Pelatihan Manajemen Puskesmas. *Jurnal Inspirasi*, 10(1), 32-48.

Susilo, Wilhelmus Hary., Aima,Havidz., Suprpti, Fitriana.(2014). *Biostatika Lanjut dan Aplikasi Riset*. Jakarta: CV.Trans Info Media.

Vernon,Bond; Bryan H, Curry;Richard G,Adams; Thomas,Obisesan; Sudhakar ,Pemminati; Vasavi R,Gorantla; Kishan,Kadur; Richard M,Millis.(2016). *Cardiovascular responses to an isometric handgrip exercise in females with prehypertension*.<http://www.najms.org/article.asp?issn=19472714;year=2016;volume=8;issue=6;spage=243;epage=249;aulast=Bond> pada tanggal 28 Januari 2020.

Vianna, L. C., & Fisher, J. P. (2019). *Reflex control of the cardiovascular system during exercise in disease*. *Current Opinion in Physiology*. doi:10.1016/j.cophys.2019.05.002

Viridis, A., Giannarelli, C., Fritsch Neves, M., Taddei, S., & Ghiadoni, L. (2010). Cigarette Smoking and Hypertension. *Current Pharmaceutical Design*, 16(23), 2518–2525. <https://doi.org/10.2174/138161210792062920>

Wellness, Berkeley.(2013). *Get a Grip on Blood Pressure*. <https://www.berkeleywellness.com/self-care/preventive-care/article/get-grip-blood-pressure> pada tanggal 22 Agustus 2019.

WHO.(2019). *Adherence to Long -Term Therapies-Evidence for Action*. <https://apps.who.int/medicinedocs/en/d/Js4883e/>

WHO.(2019).*Hypertension*. <https://www.who.int/news-room/fact-sheets/detail/hypertension> pada tanggal 22 Agustus 2019.

Williams, B., Mancia, G., Spiering, W., Agabiti Rosei, E., Azizi, M., Burnier, M., ... & Kahan, T. (2018). 2018 ESC/ESH Guidelines for the management of arterial hypertension: The Task Force for the management of arterial hypertension of the

European Society of Cardiology (ESC) and the European Society of Hypertension (ESH). *European heart journal*, 39(33), 3021-3104.

Wisnubro.(2018).*Aksi Pemerintah mengurangi Penderita Hipertensi*.
<http://jpp.go.id/humaniora/kesehatan/321819-aksi-pemerintah-mengurangi-penderita-hipertensi>

Wu, L., Yang, S., He, Y., Liu, M., Wang, Y., Wang, J., & Jiang, B. (2017). Association between passive smoking and hypertension in Chinese non-smoking elderly women. *Hypertension Research*, 40(4), 399-404.

Yehuda, Eli Ben. (2020). *Want To Lower Your Blood Pressure By 20 Points? Try This Exercise*. <https://www.functionalmedicineuniversity.com/public/1278.cfm> pada tanggal 17 Februari 2020