

## DAFTAR PUSTAKA

- Ada, L., Canning, C. & Dwyer, T. (2000). Effect of muscle length on strength and dexterity after stroke. *Clin Rehabil*, 14, 55-61.
- Alvarez, G., Cerritelli, F. & Urrutia, G. (2016). Using the template for intervention description and replication (TIDieR) as a tool for improving the design and reporting of manual therapy interventions. *Manual Therapy*, 24, 85-89.
- Anderson, F., Annett, M. & Bischof, WL. (2010). Physical rehabilitation with virtual reality with peripherals. *Stud Health Technol Inform*, 154, 229-234.
- Andrew, AW., Bohannon, RW. (2000). Distribution of muscle strength impairment following stroke. *Clin Rehabil*, 14 (1), 79-87.
- Arya, KN., Pandian, S. (2014). Interlimb neural coupling: Implications for poststroke hemiparesis. *Ann Phys Rehabil Med*, 57 (9-10), 696-713. Doi: 10.1016/j.rehab.2014.06.003.
- Arye, C. & Scally, AJ. (2014). Critical Values for Lawshe's Content Validity Ratio: Revisiting the Original Methods of Calculation. *Measurement and Evaluation in Counseling and Development*, 47 (1), 79-86.
- Bejot, Y., Tessier, AP., Cachia, C., Giroud, M., Mossiat, C., Bertrand, N., Garnier, P. & Marie, C. (2011). Time-dependent contribution of non neuronal cells to BDNF production after ischemic stroke in rats. *Neurochem Int*, 58, 102-111. Doi: 10.1016/j.neuint.2010.10.019.
- Béjot, Y., Giroud, M. 2010. Stroke in diabetic patients. *Diabetes & Metabolism*, 36, S84-S87.
- Bernhardt J., Dewey H., Thrift A., Collier J., Donnan G. (2008). A Very Early Rehabilitation Trial for Stroke (AVERT) Phase II Safety and Feasibility. *Stroke*, 39, 390-396. Doi: 10.1161/STROKEAHA.107.492363.
- Bernstein, NA. (1996). *Dexterity and Its Development*. Lawrence Erlbaum Associates Publishers. Mahwah, New Jersey.
- Best, C., Van, WF., Dennis, J., Donaghy, M., Fraser, H. & Dinan, YS. (2012). A survey of community exercise programmes for stroke survivor in Scotland. *Health Soc Care Com*, 20 (4), 400-411. Doi: 10.1111/j.1365-2524.2011.01043.
- Bland, MD., Sturmoski, A. & Whitson, M. (2012). Prediction of Discharge Walking Ability from Initial Assessment in a Stroke Inpatient Rehabilitation Facility Population. *Arch Phys Med Rehabil*.
- Blum, L., Korner, BN. (2008). Usefulness of the Berg Balance Scale in Stroke Rehabilitation: A Systematic Review. *Phys Ther*, 88, 559-566.
- Bobath, B. (1990). *Adult Hemiplegia: Evaluation and Treatment*, 3<sup>th</sup>. Butterworth Heinemann, Oxford.
- Bonan, IV., Marquer, A., Eskiizmirililer S., Yelnik, AP., Vidal, PP. (2013). Sensory reweighting in controls and stroke patients. *Clin Neurophys*, 124, 713-722.
- Buchanan, TS., Lloyd, DG., Manal, K., Besier, TF. (2004). Neuromusculoskeletal Modeling: Estimation of Muscle Forces and Joint Moments and Movements From Measurements of Neural Command. *J Appl Biomech*, 20 (4), 367-395.

- Butefisch, C., Hummelsheim, H., Denzler, P. & Mauritz, KH. (1995). Repetitive training of isolated movements improves the outcome of motor rehabilitation of the centrally paretic hand. *J Neurol Sci*, 130, 59-68.
- Calford, MB. (2002). Dynamic representational plasticity in sensory cortex. *Neuroscience*, 111 (4), 709-738.
- Campbell, DT. & Stanley, JC. (1966). *Experimantal And Quasi-Experiment al Designs for Research*, Houghton Mifflin Company Boston. Dallas Geneva, III. Hopewell, N.J. Palo Alto London.
- Caplan, LR. (2009). *Caplan's STROKE: A clinical approach*. Fourth ed. Saunders Elsevier.
- Carr, JH., Shepherd, RB. (2011). Enhancing Physical Activity and Brain Reorganization after stroke. *Neurol Res*, Hindawi Publishing Corporation. Doi: 10.1155/2011/515938.
- Cechetti, F., Fochesatto, C., Scopel, D., Nardin, P., Goncalves, CA., Netto, CA., Siqueira, IR. (2008). Effect of a neuroprotective exercise protocol on oxidative state and BDNF levels in the rat hippocampus. *Brain Res*, 1188, 182-188. Doi: 10.1016/j.brainres.2007.10.012.
- Chan, A., Yan, J., Csurhes, P., Greer, J. & McCombe, P. (2015). Circulating brain derived neurotrophic factor (BDNF) and frequency of BDNF positive T cells in peripheral blood in human ischemic stroke: effect on outcome. *J Neuroimmunol*, 268, 42-47. Doi: 10.1016/j.jneuroim.2015.06.013.
- Chen, H., Wu, C., Lin, K., Chen, C., Huang, P., Hsieh, C. & Liu, J. (2013). Rasch validation of a combined measure of basic and extended daily life functioning after stroke. *Neurorehabil Neural Repair*, 27(2), 125-32. Doi: 10.1177/1545968312457828.
- Chen, A., Xiong, L., Tong, Y. & Mao, M. (2013). The neuroprotective roles of BDNF in hypoxic ischemic brain injury (Review). *Biomed Rep*, 1, 167-176. Doi: 10.3892/br.2012.48.
- Chen, J., Venkat, P., Zacharek, A. & Chopp, M. (2014). *Neurorestorative therapy for stroke*, 8(June), 1-12. Doi:10.3389/fnhum.2014.00382.
- Cohen, H. (1999). *Neuroscience for Rehabilitation*, 2<sup>nd</sup>. Lippincott Williams & Wilkins, Philadelphia.
- Coppede F, Migliore L. 2007. *Genetic and environmental factors in neurodegenerative diseases*. In: Qureshi GA, Parvez SH, editors. Oxidative stress and neurodegenerative disorders. Amsterdam: Elsevier; 89 – 114.
- Cordun, M., Adriana, G. (2014). Functional rehabilitation strategies for the improvement of balance in patients with hemiplegia after an ischemic stroke. *Soc Behav Sci*, 117, 575-580. Doi:10.1016/j.sbspro.2014.02.265.
- Coria-Luceroa, CD., Golinia, RS., Poncea, IT., Deyurkaa, N., Anzulovicha, AC., Delgadoa, SM. & Navigatore-Fonzoa, LS. (2016). Rhythmic Bdnf and TrkB expression patterns in the prefrontal cortex are lost in aged rats. *Brain Res*, 1653, 51-58.
- Coupar, F., Pollock, A., La, L., Sackley, C., PVV., Coupar, F. & Vliet, PV. (2012). Home-based therapy programmes for upper limb functional recovery following stroke

- (Review) Home-based therapy programmes for upper limb functional recovery following stroke. *Stroke*, 5, 5–7. Doi:10.1002/14651858.CD006755.pub2.
- Donnan, GA., Fisher, M., Macleod, M., & Davis, SM. (2008). Stroke. *Lancet*. [www.thelancet.com](http://www.thelancet.com), 371.
- Darekar, A., McFadyen, BJ., Lamontagne, A. & Fung, J. (2015). Efficacy of virtual reality-based intervention on balance and mobility disorders post-stroke: a scoping review. *J Neuroeng Rehabil*, 12, 46. Doi: 10.1186/s12984-015-0035-3.
- DeJong, G., Horn, SD., Gassaway, JA., Slavin, MD. & Dijkers, MP. (2004). Toward a taxonomy of rehabilitation interventions: using an inductive approach to examine the “black box” of rehabilitation. *Arch Phys Med Rehabil*, 85: 678-686.
- Dobkin, BH. (2004). Strategies for stroke rehabilitation. *Lancet Neurol*, 3.
- Dobkin, BH., Carmichael, TS. (2005). Principles of recovery after stroke dalam Barnes, M., Dobkin, B. & Bogousslavsky, J. (editor). *Recovery After Stroke*. Cambridge: Cambridge University Press, 47-66.
- Duxbury, S., DePaul, V., Alderson, M., Moreland, J. & Wilkins, S. (2012). Individuals with stroke reporting unmet need for occupational therapy following discharge from hospital. *Occup Ther Health Care*, 26 (1), 16-32.
- Editorial. (2016). The TIDieR (Template for Intervention, descriptor and replication) checklist will benefit the physiotherapy profession. *Manual Therapy*, 24, v-vi
- Elsworth, C., Dawes, H., Sackley, C., Soundy, A., Howells, K. & Wade, D. (2008). Residual haptic sensation following stroke. *Stroke*, 39 (5), 1507-1513.
- Enager, P., Gold, L. & Lauritzen, M. (2004). Impaired neurovascular coupling by transhemispheric diaschisis in rat cerebral cortex. *J Cereb Blood Flow Metab*, 24 (7), 713-719.
- Feigin, VL., Lawes, CM., Bennet, D., Barker, CS. & Parag, V. (2009). Worldwide stroke incidence and aerly case fatality reported in 56 population-based studies: a systematic review. *Lancet Neurol*, 8 (4), 355-69.
- Fisher, A., Martin, J., Srikusalaikul, W. & Davis, M. (2013). Trends in stroke survival incidence rates in older Australians in the new millennium and forecasts into the future. *J Stroke Cerebrovas Dis*, 5, 1-12.
- Fodor, G. (2011). Primary Prevention of CVD: Treating Dyslipidemia. *Am Fam Physician*, 15: 85 (10), 1207-1208.
- Frenceschini, M., LaPorta, F., Agosti, M. & Massucci, M. (2010). Is health-related quality of life of stroke patients influenced by neurological impairments at one year after stroke?. *J Phys Rehabil Med*, 446, 389-399.
- Geurts, ACH., deHaart, M., Van, NIJW. & Duysens, J. (2005). A review of standing balance recovery from stroke. *Gait Posture*, 22 (3), 267–281. Doi: 10.1016/j.gaitpost.2004.10.002.
- Go, AS., Mozaffarian, D., Roger, VL., Benjamin, EJ., Berry, JD. & Borden, WD. (2013). Heart disease and stroke statistic-2013 update: a report from the American Heart Association. *Circulation*, 127, e6-e245. Doi: 10.1161/CIR.0b013e31828124ad.
- Goldstein, LB. (2009). *Stroke recovery and rehabilitation*. Handbook of Clinical Neurology, 94 (3<sup>rd</sup> series), 1327-1337.

- Gracies, JM. (2001). Pathophysiology of impairment in patient with spasticity and use of stretch as a treatment of spastic hypertonia. *Phys Med Rehabil Clin*, 12 (4), 747-769.
- Halsband, U., Lange, RK. (2006). Motor learning in man: A review of functional and clinical studies. *J Physiol*, 99, 414–424. Doi: 10.1016/j.jphysparis.2006.03.007.
- Harris, JE., Eng, JJ. (2010). Strength training improves upper-limb function in individual with stroke: a meta-analysis. *Stroke*, 41: 136-140.
- Harvey, RL. (2009). Cerebral Stroke Syndrome dalam *Stroke Recovery & Rehabilitation*. DemosMedical. New York.
- Hedna, V.S., Bodhit A., Ansari S., Falchook A., Stead L., Heilman K., Waters M. (2013). Hemispheric Differences in Ischemic Stroke: Is Left-Hemisphere Stroke More Common?. *JCN*, 9, 97-102.
- Hoffmann, T., Glasziou, P. & Johnston, M. (2014). *Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide* *Better reporting of interventions: template for intervention description and replication (TIDieR)*. Doi:10.1136/bmj.g1687.
- Hosp, JA., Luft, AR. (2011). Cortical plasticity during motor learning and recovery after ischemic stroke. *Neural Plast.* Hindawi Publishing Corporation. Doi: 10.1155/2011/871296.
- Hsieh, Y., Wang C., Wu, S., Chen, P. & Sheu, C. (2007). Establishing the Minimal Clinically important Difference of the Barthel Index in Stroke Patients. *Am Soc Neurorehabil*. Doi: 10.1177/1545968306294729.
- ICF: International Classification of Functioning Disability and Health. (2001). *International Classification of Functioning Disability and Health*. Geneva: World Health Organization.
- Jiang, L., Xu, H., Yu, C., (2013). Brain Connectivity Plasticity in the Motor Network after Ischemic Stroke, *Neural Plast.* Volume 2013, Article ID 924192, <http://dx.doi.org/10.1155/2013/924192>.
- Johansson, BB. (2003). Guest editorial: Neurorehabilitation and brain plasticity. *J Rehabil Med*, 35, 1.
- Johansson, BB. (2012). Multisensory stimulation in stroke rehabilitation. *Front Hum Neurosci*, 6, 60.
- Kandel, ER., Schwartz, JH. & Jessel, TM. (2000). *Principles of Neural Science*, 4<sup>th</sup>. McGraw-Hill, USA.
- Kelly-Hayes, M., Beiser, A., Kase, S., Scaramucci, A., D'Agostino, RB. & Serigala, PA. (2003). The influence of gender and age on disability following ischemic stroke: the Framingham Study. *J Stroke Cerebrovasc Dis*, 12 (3), 119-126.
- Kirshner, H.S. 2009. Differentiating Ischemic Stroke Subtypes: Risk Factors and Secondary Prevention. *Journal of The Neurological Sciences* 279 (2009): 1-8.
- Kitago T, Krakauer, JW. (2013). Motor learning principles for neurorehabilitation, *Handb Clin Neurol*, 110:93-103. Doi: 10.1016/B978-0-444-52901-5.00008-3.
- Kollen, BJ., Van, DPI., Lindeman, E., Twisk, J., & Kwakkel, G. (2005). Predicting Improvement in Gait after Stroke: A Longitudinal Prospective Study. *Stroke*, 36, 2676-2680.



- Kollen, B., Lennon SLB., Wheatley, SL., Scheper M., Buurke, JH., Halfens, J., Geurts, AC. & Kwakkel, G. (2009). The effectiveness of the Bobath Concept in Stroke Rehabilitation: What is the evidence? *Stroke*. Doi: 10.1161/STROKEAHA.108.533828.
- Kwakkel, G., Kollen, BJ., Vander, GJ. & Prevo, AJ. (2003). Probability of regaining dexterity in the flaccid upper limb: impact of severity of paresis and time since onset in acute stroke. *Stroke*, 34 (9), 2181-2186.
- Langhammer, B., Stanghelle, JK. (2012). Concerns about standards of reporting clinical trial: an RCT comparing the Bobath concept and motor relearning intervention for rehabilitation of stroke patients as an exemplar. *Physiother Res Int*, 17 (4): 244-247.
- Langhorne, P., Rudd, AG. (2009). *Stroke Service: A Global Perspective dalam Stroke Recovery & Rehabilitation*. DemosMedical. New York.
- Lei, SM., Studenski, S., Duncan, PW. & Perera, S. (2002). Persisting consequences of stroke measured by the Stroke Impact Scale. *Stroke*, 33, 1840-1844.
- Lazzaro, VD., Pellegrino, G., Pino, GD., Corbetta, M. & Ranieri, F. (2015). Val66Met BDNF Gene Polymorphism Influences Human Motor Cortex Plasticity in Acute Stroke. *Brain Stimul*, 92-96.
- Legge SD., Saposnik G., Nilanon Y., Hachinski V., 2006. Neglecting the Difference Does Right or Left Matter in Stroke Outcome After Thrombolysis? *AHA J*. 37:2066-9.
- Lennon, S. (2003). Physiotherapy practice on stroke rehabilitation: A survey. *Disabil Rehabil*, 25 (9), 455-461.
- Lehto, NK., Marley, TL. & Ezekiel, HJ. (2001). Application of motor learning principles: The physiotherapy client as a problem-solver. IV. Future directions. *Physiother Can*, 109-114.
- Li M, Peng J, Wang MD. (2014). Passive movement improves the learning and memory function of rats with cerebral infarction by inhibiting neuron cell apoptosis. *Mol Neurobiol*. 49: 216-221.
- Lieber, RL. (2002). *Skeletal Muscle Structure, Function and Plasticity. The Physiological Basis of Rehabilitation*, 2<sup>nd</sup> ed. Lippincott Williams & Wilkins, London.
- Luft, AR., Macko, CH. & Schallert, T. (2009). Physiological Basic of Rehabilitation Therapeutics in Stroke dalam *Stroke Recovery & Rehabilitation*. demosMedical. New York.
- Lundy-Ekman, L. (2013). *Neuroscience Fundamentals for Rehabilitation*. Saunders Elsevier Inc.
- Madinier, A., Bertrand, N., Rodier, M., Quirie, A., Mossiat, C., Tessier, AP., Marie, C. & Garnier, P. (2013). Ipsilateral versus contralateral spontaneous post-stroke neuroplastic change: involvement of BDNF?. *Neuroscience*, 231, 169-181. Doi: 10.1016/j.neuroscience.2012.11.054.
- Makizako, H., Kabe, N., Takano, A. & Isobe, K. (2015). Use of the Berg Balance Scale to Predict Independent Gait After Stroke: A Study of an Inpatient Population in Japan. *PM&R*, 7(4), 392-399. Doi: 10.1016/j.pmrj.2015.01.009.

- Marin, MA. & Carmichael, ST. 2018. Mechanisms of demyelination and remyelination in the young and aged brain following white matter stroke. *Neurobiol Dis.* Doi:10.1016/j.nbd.2018.07.023.
- Matsuda F, Sakakima H, Yoshida Y. (2011). The effects of early exercise on brain damage and recovery after focal cerebral infarction in rats. *Acta Physiol*, 201: 275–287.
- Matz, K., Keresztes, K., Tatschl, C., Nowotny, M., Dachenhausenm, A., Brainin, M., Toumletho, J. (2006). Disorders of glucose metabolism in acute stroke patients: an underrecognized problem. *Pubmed Diabetes Care*. 29,792-797.
- Mayo, NE., Wood, DS., Cote, S., Durcan, L. & Carlton, J. (2002). Activity, participation, and quality of life 6 months poststroke. *Arch Phys Med Rehabil*, 83 (8), 1035-1042.
- Mayston, M. (2008). Editorial: Bobath Concept: Bobath@50: mid-life crisis- What of the future? *Physiother Res Int*, 13 (3).
- McDermott, A., Korner, BN. (2012). *Bilateral arm training dalam Stroke Engine Intervention*. Montreal: McGill University. 999 =87.
- Michielsen, ME., Selles RW., Van, DGJN., Eckhardr, M., Yavuzer, G. & Stam, HJ. (2010) Motor recovery and cortical reorganization after mirror therapy in chronic stroke patients. *Neurorehabil Neural Repair*, 25 (3), 223-233.
- Morrealle M, Marchione P, Pili A. (2015). Early versus delayed rehabilitation treatment in hemiplegic patients with ischemic stroke: proprioceptive or cognitive approach? *Eur J Phys Rehabil Med*.
- Morris, JH., Williams, B. (2009). Optimising long-term participation in physical activities after stroke: Exploring new ways of working for physiotherapists. *Physiotherapy* 95. Elsevier Ltd.
- Morris, JH., Van, WF., Joice, S. & Donaghy, M. (2013). Predicting health related quality of life 6 months after stroke: the role of anxiety and upper limb dysfunction. *Disabil Rehabil*, 35 (4), 291-299.
- Nie J, Yang X. (2017). Modulation of synaptic plasticity by exercise training as a basis for ischemic stroke rehabilitation. *Cel Mol Neurobiol*, 37: 5-16.
- Nijland, RR., Erwin, E., Barbara, C. & Kwakkel, G. (2010). Precence of finger extension and shoulder abduction within 72 hours after stroke predict functional recovery. *Stroke*. American Stroke Association. Doi: 10.1161/STROKEAHA.109.572065.
- Nudo, RJ. (2007). Post-infarct cortical plasticity and behavioral recovery. *Stroke*, 38 (part 2), 840-845.
- Nudo, RJ. (2009). The Mechanisms and Neurophysiology of Recovery from Stroke dalam *Stroke Recovery & Rehabilitation*. demosMedical. New York.
- Nudo, RJ. (2011). Neural bases of recovery after brain injury. *J Commun Disord*, 44, 515 – 520.
- Ojakangas, CL., Donoghue, JP. (2006). Plasticity of Cerebral Motor Function: Implications for Repair and Rehabilitation dalam *Neural Rep Rehabil*. Cambridge University Press.
- Olaleye, O., Hamzat, T. & Owolabi, M. (2014). Development and evaluation of the primary healthcare-based physiotherapy intervention and its effects on selected

- indices of stroke recovery, *J Disabil Rehabil*, 36(1):49-54. Doi: 10.3109/09638288.2013.777804.
- Otsuko, S., Sakakima, H., Sumizono, M., Takada, S., Terashi, T. & Yoshida, Y. (2015). The neuroprotective effects of preconditioning exercise on brain damage and neurotrophic factors after focal brain ischemia in rats. *Behav Brain Res*, 303, 9-18. Doi: 10.1016/j.bbr.2016.01.049.
- Park, JK., Hong, YP. & Lee, SJ. (2017). Effects of exercise on mature or precursor brain-derived neurotrophic factor pathways in ovariectomized rats, *Mol Med Reports*, 5, 435-440. <https://doi.org/10.3892/mmr.2017.6614>.
- Permenkes RI Nomor 1045/MENKES/PER/XI/2006 tentang Pedoman Organisasi Rumah Sakit di Lingkungan Departemen Kesehatan.
- Permenkes RI Nomor 340/MENKES/PER/III/2010 tentang Klasifikasi Rumah Sakit.
- Permenkes RI Nomor 80 tahun 2013 tentang Penyelenggaraan Pekerjaan dan Praktik Fisioterapis.
- Petzold, A., Psotta, L., Brigadski, T., Endres, T. & Lessmann, V. (2015). Chronic BDNF deficiency leads to an age-dependent impairment in spatial learning. *Neurobiol Lear Mem*, 120, 52–60.
- Pittock, SB., Meldrum, D., Hardiman, O., Thornton, J., Brennan, P. & Moroney, JT. (2003). The Oxfordshire Community Stroke Project Classification: correlation with imaging, associated complications, and prediction of outcome in acute ischemic stroke. *J Stroke Cerebrovasc Disc*, 12, 1-7.
- Plow, EB., Cunningham, DA., Varnerin, N. & Machado, A. (2014). Rethinking stimulation of the brain in stroke rehabilitation: Why higher motor areas might be better alternatives for patient with greater impairments. *Neuroscience*. Doi: 10.1177/1073858414537381.
- Pollock, A., Baer, G., Campbell, P., Forster, A., Morris, J. & Langhorne, P. (2014). Physical rehabilitation approaches for the recovery of function and mobility following stroke (Review) Physical rehabilitation approaches for the recovery of function and mobility following stroke, *Cochrane Lib*, 4. Doi: 10.1002/14651858.CD001920.pub3.
- Pollock, A., Se, F., Langhorne, P., Ge, M., Mehrholz, J. & Wijck, FV. (2014). Interventions for improving upper limb function after stroke (Review), *Cochrane Lib*, 11. Doi:10.1002/14651858.CD010820.pub2.
- Pomeroy, VM., Clark, CA., Miller, JSG., Baron, J., Markus, HS. & Tallis, RC. (2006). *The Potential for Utilizing the "Mirror Neurone System" to Enhance Recovery of the Severely Affected Upper Limb Early after Stroke: A Review and Hypothesis*, 4–13. Doi:10.1177/1545968304274351.
- Pomeroy, VM, King, L., Pollock, A., Baily-Hallam, A. & Langhorne, P. (2011). Electrostimulation for promoting recovery of movement or functional ability after stroke. *Cochrane Collaboration*. Doi: 10.1002/14651858.CD003241.pub2.
- Profil RSUD Dr. Moewardi Surakarta.
- Purves, D., Augustine, GJ., Fitzpatrick, D., Hall, WC., LaMantia, AS., McNamara, JO. & Williams, SM. (2004). *Neuroscience*. 3<sup>ed</sup>. Sinauer Associates, Massachusetts, pp. 582.

- Quinn, TJ., Langhorne, P. & Stott, DJ. (2011). Barthel Index for Stroke Trials: Development, Properties, and Application. *Stroke*, 42 (4), 1146–1151. Doi: 10.1161/STROKEAHA.110.598540.
- Rahayu UB., Wibowo, S. Setyopranoto, I. (2017). Development of Motor Learning Implementation for Ischemic Stroke: Finding Consensus Expert. *J Med Sci*, 49(4).
- Raine, S., Meadows, L. & Ellerington, M. (2009). *Bobath Concept: theory and clinical practice in neurological rehabilitation*. Oxford: Wiley-Blackwell.
- Riemanna, BL., Liningerb, M., Kirklandc, MK. & Petrizzod, J. (2018). Age related changes in balance performance during self-selected and narrow stance testing. *Arch Gerontol Geriatr*, 75, 65–69.
- Risedal, A., Zeng, J., Johansson, BB. (1999). Early Training May Exacerbate Brain Damage After Focal Brain Ischemia in the Rat, *J Cer Blood Flow and Met*, 19, 997-1 003.
- Roy, MA., Korner, BN., Teasell, R., Foley, N., Bhogal, S. & Bitensky, J. (2010). *Functional electrical stimulation: upper extremity dalam Stroke Engine Intervention*. Montreal: McGill University. <http://strokengine.ca/intervention/index.php?page=topic&id=5910>.
- Ruan, L., Wang, B., ZhuGe, Q. & Jin, K.I (2015). Coupling of neurogenesis and angiogenesis after ischemic stroke. *Brain Res*, 1623, 166-173. Doi: 10.1016/j.brainres.2015.02.042.
- Saver, JL. (2009). Target brain: neuroprotection and neurorestoration in ischemic stroke. *Rev Neurol dis*, 7, S14-21.
- Saposnik, G., Teasell, R., Mamdani, M., Hall, J., McIlroy, W. & Cheung, D. (2010). Effectiveness of virtual reality using Wii gaming technology in stroke rehabilitation: a pilot randomized clinical trial and proof of principles. *Stroke*, 47 (7), 1477-1484.
- Schaecher, JD. (2004). Motor rehabilitation and brain plasticity after hemiparetic stroke. *Prog Neurobiol*, 73 (1), 61–72. Doi: 10.1016/j.pneurobio.2004.04.001.
- Schellinger, PD., Bryan RN, Caplan LR., Detre JA., Edelman RR., Jaigobin C., Kidwell CS., Mohr JP., Sloan M., Sorensen AG., Warach S. (2010). Evidencebased guideline: The role of diffusion and perfusion MRI for the diagnosis of acute ischemic stroke. *AAN*, 75,177–185.
- Schmidt, RA., Lee, TD. (2014). *Motor Learning and Performance*. 5<sup>th</sup> Edition. Champaign, IL: Human Kinetics.
- Schulz, KF., Altman, DG., Moher, D. & Group, C. (2010). *CONSORT 2010 Statement: Updated guidelines for reporting parallel group randomised trials*.
- Schwartzkroin, P. (2001). Mechanisms of brain plasticity: From normal brain function to pathology. *Int Rev Neurobiol*, 85, 1-15.
- Scott, W., Stevens, J. & Binder-MacLeod, SA. (2001). Human skeletal muscle fiber type classification. *Phys Ther*, 81, 1810-1816.
- Shao, Q., Bassett, DN. & Manal, K. (2009). An EMG-driven model to estimate muscle forces and joint moments in stroke patients. *Comput Biol Med*, 39, 12, 1083-1088. Doi: 10.1016/j.combiomed.2009.09.002.

- Shaughnessy, N. & Michael, K. (2009). *Stroke in Older Adults dalam Stroke Recovery & Rehabilitation*. Demos Medical Publisng. New York.
- SOP Nomor Dokumen 02-05-P-646 RSUD Dr. Moewardi Surakarta.
- Stein, JH., Macho, RF., Winstein, JC. & Zorowitz, RD. (2009). *Stroke Recovery & Rehabilitation*. Demos Medical Publisng. New York.
- Stroke Associatioan. (2012). Struggling to Recover. <http://www.stroke.org.uk/campaigns>.
- Sveen, U., Thommessen, B., Bautz, HE., Wyller, TB. & Laake, K. (2004). Well-being and instrumental activities of daily living after stroke. *Clin Rehabil*, 18 (3), 267–274. Doi: 10.1191/0269215504cr719oa.
- Taub, E. (1993). Techniques to improve chronic motor deficit after stroke, *Arc Phys Med Rehabil*, 74, 347-354.
- Taub, E., Uswatte, G., Mark, VW. & Morris, DM. (2006). The learned nonuse phenomenon: implications for rehabilitation. *Eur Medicophys*, 42, 241-255.
- Taylor JA. Ivry RB. (2012). The role of strategies in motor learning. *Ann N Y Acad Sci*, 1251:1-12.
- Teasell, R., Bayona, NA. & Bitensky, J. (2005). Plasticity and Reorganization of the Brain Post Stroke. *Stroke Rehabil*, 12 (3), 11-26.
- The AVERT Trial Collaboration Group. (2015). Efficacy and savety of very early mobilization within 24 h of stroke onset (AVERT): a randomized controlled trial. *Lancet*, 386, 46-55.
- The National Institute for Health and Care Excellence. (2013). *Stroke Rehabilitation: Long term rehabilitation after stroke*. Clinical Guideline 162.
- Tyson, SF., Connell, LA., Busse, ME. & Lennon, S. (2009). What is Bobath? A survey of UK stroke physiotherapists perceptions of the content of the Bobath concept to treat postural control and mobility problems after stroke. *Disabil Rehabil*, 31 (6), 448-457.
- Uswatte, G., Taub, E., Morris, D., Barman, J. & Crago, J. (2006). Contribution of the shaping and restraint components of constraint-induced movement therapy to treatment outcome. *NeuroRehabil*, 21 (2), 147-156.
- Vincent, C., Desrosiers, J., Landreville, P. & Demers, L. (2009). Burden of caregivers of people with stroke: Evolution and predictors. *Cerebrovasc Dis*, 27, 456-464.
- Warlow, C., Van, GJ., Dennis, M., Wardlaw, JM., Bamford, JM. & Hankey, GJ. (2008). *Stroke: Practical Management*. 3<sup>rd</sup> Edition. Oxford: Blackwell Publisng.
- Wicaksono, IEP., Wati, AP., Muhartomo, H. (2017). Perbedaan Jenis Kelamin sebagai Faktor Risiko terhadap Keluaran Klinis pasien Stroke Iskemik. *JKD*, 6 (2), 655-662.
- Winstein, CJ., Merians, A. & Sullivan, K. (1997). Motor learning after unilateral brain damage. *Neuropsychol*, 37, 975-987.
- Wishart, LR., Lee, TD., Ezekiel, HJ., Marley, TL. & Lehto, NK. (2000). Application of motor learning principles: The physiotherapy client as a problem-solver. I. Concepts. *Physiother Can*, Summer, 229-232.
- Wolf, SL., Butler, AJ., Alberts, JL. & Kim, MW. (2006). Contemporary linkages between EMG, kinetics and stroke rehabilitation, 15, 229–239. Doi: 10.1016/j.jelekin.2005.01.002.



- Wu, C., Chuang, L., Lin, K. & Horng, Y. (2011). Responsiveness and validity of two outcome measures of instrumental activities of daily living in stroke survivors receiving rehabilitative therapies. *Clin Rehabil*, 25 (2), 175–183. Doi: 10.1177/0269215510385482.
- Xing Y, Yang SD, Dong F. (2018). The beneficial role of early exercise training following stroke and possible mechanisms. *Life Sci*, 32-37.
- Yaghi, S., Bianchia, N., Amoleb, A., Hindujaa, A. (2014). ASPECTS is a predictor of favorable CT perfusion in acute ischemic stroke. *J Neurorad*, 41, 184-187.
- Yamatoa, TP., Mahera, CG., Saragiottoa, BT., Catleyb, MJ. & Moseley, AM. (2018). Rasch analysis suggested that items from the template for intervention description and replication (TIDieR) checklist can be summed to create a score. *J Clin Epidemiol*, 101, 28-34.
- Yavuzer, G., Senel, A., Atay, MB. & Stam, HJ. (2008). “Playstation eyetoy games” improve upper extremity-related motor functioning in subacute stroke: a randomized controlled clinical trial. *Eur J Phys Rehabil Med*, 44(3), 237-244.
- Zigmond, MJ., Cameron, JL., Hoffer, BJ. & Smeyne, RJ. (2012). Neurorestoration by physical exercise: moving forward. *Parkinsonism Dis*, 18, S147-S150.
- Zhang P, Zhang Y, Zhang J. (2013). Early Exercise Protects against cerebral ischemic injury through inhibiting neuron apoptosis in cortex in rats. *Int J Mol Sci*, 14: 6074-6089.
- Zhou, Z., Daviet, J., Marin, B., Macian, F., Salle, J., Zhou, N. & Zhu, Y. (2010). Vital and functional outcomes of the first-ever hemispheric stroke, epidemiological comparative study between Kunming (China) and Limoges (France). *Ann Phys Rehabil Med*, 53 (9), 547–558. Doi: 10.1016/j.rehab.2010.09.001.
- Zhu, XJ., Wang, T., Chen, Q., Wang, X., Hou, H. & Wang, HX. (2007). The effects of standardised rehabilitation treatment on the outcome of activities of daily living in patiens with hemiplegia after stroke. *J Cerebrovas Dis*, 4 (6), 254-259.