PILATES REFERENCES (235)

Updated May 2019

*Newly added references in blue

**2019 references in red

Sherri R. Betz, PT, GCS, PMA®-CPT Chair, PMA® Research Committee PMA® Certified Pilates Teacher

Meta Analyses and Systematic Reviews (28)

Aladro-Gonzalvo AR, et al. (2013). Pilates-based exercise for persistent, non-specific low back pain and associated functional disability: a meta-analysis with meta-regression. [Review]. *J Bodywork Move Ther* 17(1): 125-136.

Barker AL, Bird ML, Talevski J. (2015) Effect of Pilates exercise for improving balance in older adults: a systematic review with meta-analysis. *Arch Phys Med Rehabil*. Apr;96(4):715-23. Review.

Bullo V, et al. (2015). The effects of Pilates exercise training on physical fitness and wellbeing in the elderly: A systematic review for future exercise prescription. *Prev Med* 75: 1-11.

Byrnes K, et al. Is Pilates an effective rehabilitation tool? A systematic review. *J Bodywork Move Ther* 22(1): 192-202.

Campos RR, et al. (2016). The effect of the Pilates method on the physical conditioning of healthy subjects: a systematic review with meta-analysis. *J Sports Med Phys Fitness*. Jul-Aug;56(7-8):864-73.

Cancela J, et al. (2014). Effects of Pilates method in physical fitness on older adults. A systematic review. *European Reviews of Aging & Physical Activity* 11(2): 81-94.

Costa LOPH, et al. (2012). Pilates for low-back pain. Cochrane Database of Systematic Reviews (12).

Cruz-Ferreira A, et al. (2011) A Systematic Review of the Effects of Pilates Method of Exercise in Healthy People. *Arch Phys Med Rehabil* Dec;92:2071-81.

de Oliveira Francisco C., et al. (2015). Effects of Pilates method in elderly people: Systematic review of randomized controlled trials. *J Bodyw Mov Ther* **19**(3): 500-508.

Engers PB, et al. (2016). The effects of the Pilates method in the elderly: a systematic review. Rev Bras Reumatol.

Giangregorio LM, et al. (2015). Too Fit To Fracture: outcomes of a Delphi consensus process on physical activity and exercise recommendations for adults with osteoporosis with or without vertebral fractures. *Osteoporos Int* 26(3): 891-910.

Granacher U, et al. (2013). The importance of trunk muscle strength for balance, functional performance, and fall prevention in seniors: a systematic review. *Sports Med* 43(7): 627-641.

Kamioka H, et al. (2016). Effectiveness of Pilates exercise: A quality evaluation and summary of systematic reviews based on randomized controlled trials. <u>Complement Ther Med</u> 25: 1-19.

La Touche R, et al. (2007) Treating non-specific chronic low back pain through the Pilates Method. *J Bodywork Move Ther* Dec;12:364-70. (Systematic Review)

Lim EC, et al. (2011) Effects of Pilates-based exercises on pain and disability in individuals with persistent nonspecific low back pain: a systematic review with meta-analysis. *J Orthop Sports Phys Ther* Feb;41(2):70-80.

Mazzarino M, et al. (2015) Pilates method for women's health: Systematic review of randomized controlled trials. *Arch Phys Med Rehabil.*

Miranda S & Marques A. (2018). Pilates in noncommunicable diseases: A systematic review of its effects. *Complement Ther Med*, 39, 114-130.

Miyamoto GC, Costa LO, Cabral CM. (2013). Efficacy of the Pilates method for pain and disability in patients with chronic nonspecific low back pain: a systematic review with meta-analysis. *Braz J Phys Ther* 17: 517-532.

Moreno-Segura N, et al. (2018). The Effects of the Pilates Training Method on Balance and Falls of Older Adults: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Journal of Aging & Physical Activity*, 26(2), 327-344.

Patti A, et al. (2015). Effects of Pilates exercise programs in people with chronic low back pain: a systematic review. *Medicine* 94(4): e383-e383.

Pereira LM, et al. (2011) Comparing the Pilates method with no exercise or lumbar stabilization for pain and functionality in patients with chronic low back pain: Systematic review and meta-analysis. *Clin Rehabil* Aug 19.

Pinto-Carral A, et al. (2018). Pilates for women with breast cancer: A systematic review and metaanalysis. *Complement Ther Med, 41*, 130-140.

Posadzki P, et al. (2011) Pilates for low back pain: a systematic review. *Complement Ther Clin Pract May;17(2):85-9.*

Sanchez-Lastra, M. A., et al. (2019). "Pilates for people with multiple sclerosis: A systematic review and meta-analysis." Mult Scler Relat Disord 28: 199-212.

Yamato TP, et al. (2015) Pilates for low back pain. *Cochrane Database Syst Rev.* Jul 2;(7):CD010265. Review.

Yamato TP, et al. (2016). Pilates for Low Back Pain: Complete Republication of a Cochrane Review. Spine (Phila Pa 1976) 41(12): 1013-1021.

Wells C et al. (2012) Defining Pilates exercise: A systematic review. Complement Ther Med Feb 2012.

Wells C, et al. (2013). Effectiveness of Pilates exercise in treating people with chronic low back pain: a systematic review of systematic reviews. *BMC Medical Research Methodology* 13(1), 7.

<u>Literature Reviews (3)</u>

Eliks, M., et al. (2019). "Application of Pilates-based exercises in the treatment of chronic non-specific low back pain: state of the art." <u>Postgrad Med J</u> **95**(1119): 41-45.

Gonzales AI, et al. (2016). Pilates Exercise for Hypertensive Patients: A Review of the Literature. <u>Altern Ther Health Med</u> 22(5): 38-43.

Vaquero-Cristóbal R, et al. (2015) The Effects of the Pilates Method on Hamstring Extensibility, Pelvic Tilt and Trunk Flexion. *Nutr Hosp.* Nov 1;32(5):1967-86. Spanish (Literature Review)

Randomized Controlled Trials (106)

Adi L, et al. (2018). Modified Pilates as an adjunct to standard physiotherapy care for urinary incontinence: a mixed methods pilot for a randomised controlled trial. *BMC Women's Health, Vol 18, Iss* 1, *Pp 1-12*.

Aibar-Almazan, A., et al. (2019). "Effects of Pilates on fall risk factors in community-dwelling elderly women: A randomized, controlled trial." Eur J Sport Sci: 1-9.

Altan L, et al. (2009) Effect of Pilates training on people with fibromyalgia syndrome: a pilot study. *Arch Phys Med Rehabil* Dec;90(12):1983-8. (Randomized Controlled Trial)

Altan L, et al. (2012) Effect of Pilates training on people with ankylosing spondylitis. *Rheumatol Int* 32(7): 2093-2099.

Anderson BA. (2005) Randomized clinical trial comparing active versus passive approaches to the treatment of recurrent and chronic low back pain. *Dissertation submitted to University of Miami for doctoral thesis*. *Dec 2005*.

Angın E, Erden Z, Can F. (2015) The effects of clinical Pilates exercises on bone mineral density, physical performance and quality of life of women with postmenopausal osteoporosis. *J Back Musculoskelet Rehabil*. 2015;28(4):849-58.

Ashrafinia F, et al. (2015) Effect of Pilates exercises on postpartum maternal fatigue. *Singapore Med J*. Mar;56(3):169-73.

Barker AL, et al. (2016). Feasibility of Pilates exercise to decrease falls risk: a pilot randomized controlled trial in community-dwelling older people. Clin Rehabil 30(10): 984-996.

Beatriz Mendes T & Marcelo Tavella N. (2018). Effect of pilates method on inspiratory and expiratory muscle strength in the elderly. *Revista Brasileira de Cineantropometria e Desempenho Humano, Vol 20, Iss 1, Pp 1-9 (2018)*(1), 1.

Bird ML, et al. (2012) A Randomized Controlled Study Investigation Static and Dynamic Balance in Older Adults After Training. *Arch Phys Med Rehabil* Jan; 93(1):43-9.

Borges J, et al. (2014). Pilates exercises improve low back pain and quality of life in patients with HTLV-1 virus: A randomized crossover clinical trial. *J Bodywork Move Ther* 18(1): 68-74.

Bulguroglu I, et al. (2017). The effects of Mat Pilates and Reformer Pilates in patients with Multiple Sclerosis: A randomized controlled study. *NeuroRehabilitation* 41(2): 413-422.

Campos de Oliveira L, et al. (2015) Effects of Pilates on muscle strength, postural balance and quality of life of older adults: a randomized, controlled, clinical trial. *J Phys Ther* Sci. Mar;27(3):871-6.

Cancelliero-Gaiad Karina M, et al. (2014). Respiratory pattern of diaphragmatic breathing and Pilates breathing in COPD subjects. *Revista Brasileira de Fisioterapia_*(Sao Carlos (Sao Paulo, Brazil) 18(4): 291-299. (Prospective, Randomized Crossover Trial)

Carrasco-Poyatos, M., et al. (2019). "Pilates vs. muscular training in older women. Effects in functional factors and the cognitive interaction: A randomized controlled trial." Physiol Behav **201**: 157-164.

Critchley DJ, et al. (2011) Effect of Pilates mat exercises and conventional exercise programmes on transversus abdominis and obliquus internus abdominis activity: pilot randomised trial. *Man Ther* Apr;16(2):183-9.

Cruz-Díaz D, et al. (2015) Effects of a six-week Pilates intervention on balance and fear of falling in women aged over 65 with chronic low-back pain: A randomized controlled trial. *Maturitas*. Dec;82(4): 371-6.

Cruz-Díaz D, et al. (2016) Short- and long-term effects of a six-week clinical Pilates program in addition to physical therapy on postmenopausal women with chronic low back pain: a randomized controlled trial. *Disabil Rehabil.* Jun;38(13):1300-8.

Cruz-Díaz D, et al. (2018). The effectiveness of 12 weeks of Pilates intervention on disability, pain and kinesiophobia in patients with chronic low back pain: a randomized controlled trial. *Clinical Rehabilitation*, 32(9), 1249-1257.

Cruz-Ferreira A et al. (2013) Does Pilates-Based Exercise Improve Postural Alignment in Adult Women? *Women & Health*. Aug; 53(6): 597-611. (Randomized Controlled Trial)

Culligan PJ, et al. (2010) A randomized clinical trial comparing pelvic floor muscle training to a Pilates exercise program for improving pelvic muscle strength. *Int Urogynecol J.* Apr;21(4):401-8.

da Costa LM, et al. (2016) Effect of the Pilates method on women with temporomandibular disorders: A study protocol for a randomized controlled trial. *J Bodyw Mov Ther.* Jan;20(1):110-4.

da Fonseca JL, et al. (2009) Laboratory gait analysis in patients with low back pain before and after a Pilates intervention. *J Sport Rehabil*. May;18(2):269-82.

da Luz MA, et al. (2013). Effectiveness of mat Pilates or equipment-based Pilates in patients with chronic non-specific low back pain: a protocol of a randomised controlled trial. *BMC Musculoskeletal Disorders* 14: 16-16.

Dale LM, Mikuski C, Miller J. (2015) Outcomes of a pilates-based intervention for individuals with lateral epicondylosis: A pilot study. *Work;*53(1):163-74. (Randomized Controlled Trial)

de Araujo Cazotti L, et al. (2018). Effectiveness of the Pilates Method in the Treatment of Chronic Mechanical Neck Pain: A Randomized Controlled Trial. *Archives of Physical Medicine & Rehabilitation*, 99(9), 1740-1746.

de Oliveira, L. C., et al. (2019). "Effects of Whole-Body Vibration Versus Pilates Exercise on Bone Mineral Density in Postmenopausal Women: A Randomized and Controlled Clinical Trial." <u>J Geriatr Phys</u> <u>Ther</u> **42**(2): E23-e31.

Donath L, et al. (2016) Pilates vs. Balance Training in Health Community-Dwelling Seniors: a 3-arm, Randomized Controlled Trial. *Int J Sports Med.* Mar;37(3):202-10.

Gabizon H, et al. (2016). The Effects of Pilates Training on Balance Control and Self-Reported Health Status in Community-Dwelling Older Adults: A Randomized Controlled Trial. *J Aging Phys Act* 24(3): 376-383.

Donzelli S, et al. (2006) Two different techniques in the rehabilitation treatment of low back pain: a randomized controlled trial. *Eura Medicophys* 42:205-10.

Dunleavy K, et al. (2016) Comparative effectiveness of Pilates and yoga group exercise interventions for chronic mechanical neck pain: quasi-randomised parallel controlled study. *Physiotherapy* 102(3): 236-242.

Eftekhari E, & Etemadifar M. (2018). Impact of Clinical Mat Pilates on Body Composition and Functional Indices in Female Patients With Multiple Sclerosis. *Crescent Journal of Medical & Biological Sciences*, *5*(4), 297-305.

Eyigor S, et al. (2010) Effects of Pilates exercises on functional capacity, flexibility, fatigue, depression and quality of life in female breast cancer patients: a randomized controlled study. *Eur J Phys Rehabil Med* May 6.

Finatto P, et al. (2018). Correction: Pilates training improves 5-km run performance by changing metabolic cost and muscle activity in trained runners. *PLoS One*, *13*(4).

Fourie M, et al. (2013). Effects of a mat Pilates programme on body composition in elderly women. (Randomized Controlled Trial) *West Indian Med J* 62(6): 524-528.

Fox EE, et al. (2016). Effects of Pilates-Based Core Stability Training in Ambulant People With Multiple Sclerosis: Multicenter, Assessor-Blinded, Randomized Controlled Trial. *Phys Ther* 96(8): 1170-1178.

Franco KFM, et al. (2018). Predictive factors for progression through the difficulty levels of Pilates exercises in patients with low back pain: a secondary analysis of a randomized controlled trial. *Brazilian Journal of Physical Therapy / Revista Brasileira de Fisioterapia*, 22(6), 512-518.

Franco KM, et al. (2017). Is Interferential Current Before Pilates Exercises More Effective Than Placebo in Patients With Chronic Nonspecific Low Back Pain?: A Randomized Controlled Trial. *Arch Phys Med Rehabil*, *98*(2), 320-328.

Franco, K. F. M., et al. (2019). "Effectiveness and cost-effectiveness of the modified Pilates method versus aerobic exercise in the treatment of patients with fibromyalgia: protocol for a randomized controlled trial." <u>BMC Rheumatol</u> **3**: 2.

Gabizon H, et al. (2016). The Effects of Pilates Training on Balance Control and Self-Reported Health Status in Community-Dwelling Older Adults: A Randomized Controlled Trial. *J Aging Phys Act* 24(3): 376-383.

Gladwell V, et al. Does a Program of Pilates Improve Non-Specific Low Back Pain? *J Sport Rehabil* 15, 338-350. (Randomized Controlled Trial)

Gomes CS, et al. (2017). The effects of Pilates method on pelvic floor muscle strength in patients with post-prostatectomy urinary incontinence: A randomized clinical trial. *Neurourol Urodyn*.

Gonzalez-Galvez, N., et al. (2019). "Functional improvements after a pilates program in adolescents with a history of back pain: A randomised controlled trial." Complement Ther Clin Pract 35: 1-7.

Greblo Jurakic Z, et al. (2017). Effects of feedback-based balance and core resistance training vs. Pilates training on cognitive functions in older women with mild cognitive impairment: a pilot randomized controlled trial. *Aging Clin Exp Res*.

Guilherme Medeiros de A, et al. (2018). The influence of inspiratory muscle training combined with the Pilates method on lung function in elderly women: A randomized controlled trial. *Clinics*, Vol 73, Iss 0 (0).

Guimararaes GV, et al. (2011) Pilates in Heart Failure Patients: A Randomized Controlled Pilot Trial. *Cardiovasc Ther* Jul 10.

Hagen S, et al. (2014). A multicentre randomised controlled trial of a pelvic floor muscle training intervention for the prevention of pelvic organ prolapse (PREVPROL). *Neurourology and Urodynamics* 33(6): 852-853.

Hasanpour-Dehkordi A, et al. (2017). A Comparison of the Effects of Pilates and McKenzie Training on Pain and General Health in Men with Chronic Low Back Pain: A Randomized Trial. *Indian J Palliat Care*, 23(1), 36-40.

Irez GB, et al. (2011). Integrating Pilates Exercise into an Exercise Program for 65+ Year-Old Women to Reduce Falls. (Randomized Controlled Trial) *Journal of Sports Science & Medicine* 10(1): 105-111

Jago R, et al. (2006) Effect of 4 weeks of Pilates on the body composition of young girls. *Preventive Medicine* 2006. (Randomized Controlled Trial)

Johnson, et al. (2007) The effects of Pilates-based exercise on dynamic balance in healthy adults. *J Bodywork Move Ther.* 11(3): 238-242. (Randomized Controlled Trial)

Kalron A, et al. (2016). Pilates exercise training vs. physical therapy for improving walking and balance in people with multiple sclerosis: A randomized controlled trial. *Clin Rehabil*.

Kalron A, et al. (2017). Pilates exercise training vs. physical therapy for improving walking and balance in people with multiple sclerosis: a randomized controlled trial. *Clin Rehabil*, *31*(3), 319-328.

Karaman A, et al. (2017). Do Pilates-based exercises following total knee arthroplasty improve postural control and quality of life? *Physiother Theory Pract*, 33(4), 289-295.

Kibar S, et al. (2015) Is Pilates exercise program effective on balance, flexibility and muscle endurance? Randomized, controlled study. *J Sports Med Phys Fitness*. Oct 16.

Kim ST and Lee JH. (2017). The effects of Pilates breathing trainings on trunk muscle activation in healthy female subjects: a prospective study. *J Phys Ther Sci*, 29(2), 194-197.

Kofotolis N, et al. (2016). Effects of Pilates and trunk strengthening exercises on health-related quality of life in women with chronic low back pain. *J Back Musculoskelet Rehabil*. Nov 21;29(4):649-659.

Kovach MV. (2013) Effects of Pilates and aqua fitness training on older adults' physical functioning and quality of life. *Biomedical Human Kinetics* 5, 22-27. (Randomized Controlled Trial)

Kucuk F, et al. (2016). Improvements in cognition, quality of life, and physical performance with clinical Pilates in multiple sclerosis: a randomized controlled trial. *J Phys Ther Sci*, 28(3), 761-768.

Kucukcakir N, et al. (2013). Effects of Pilates exercises on pain, functional status and quality of life in women with postmenopausal osteoporosis. *J Bodyw Mov Ther* 17(2): 204-211. (Randomized Controlled Trial)

Lausen A, et al. (2018). Modified Pilates as an adjunct to standard physiotherapy care for urinary

incontinence: a mixed methods pilot for a randomised controlled trial. *BMC Women's Health, 18,* 1-N.PAG.

Lee H, et al. (2016). Effects of 8-week Pilates exercise program on menopausal symptoms and lumbar strength and flexibility in postmenopausal women. *J Exerc Rehabil*, 12(3), 247-251.

Lee SM, et al. (2016). Clinical effectiveness of a Pilates treatment for forward head posture. *J Phys Ther Sci*, 28(7), 2009-2013.

Lim HS, et al. (2016). The effects of Pilates exercise training on static and dynamic balance in chronic stroke patients: a randomized controlled trial. *J Phys Ther Sci*, 28(6), 1819-1824.

Manshouri M, et al. (2014). Effects of Pilates Exercises on Flexibility and Volleyball Serve Skill in Female College Students. *Sport Scientific & Practical Aspects 11(2): 19-25.* (Randomized Controlled Trial)

Marandi SM, et al. (2013). A comparison between Pilates exercise and aquatic training effects on muscular strength in women with Multiple Sclerosis. *Pakistan Journal of Medical Sciences* 29(1 SUPPL.): 285-289. (Randomized Controlled Trial)

Marinda F, et al. (2013). Effects of a mat Pilates program on cardiometabolic parameters in elderly women. *Pakistan Journal of Medical Sciences* 29(2): 500-504. (Randomized Controlled Trial)

Markovic G, et al. (2015) Effects of feedback-based balance and core resistance training vs. Pilates training on balance and muscle function in older women: a randomized-controlled trial. *Arch Gerontol Geriatr.* Sep-Oct;61(2):117-23.

Marshall PWM, et al. (2013). Pilates exercise or stationary cycling for chronic nonspecific low back pain: Does it matter? A randomized controlled trial with 6-month follow-up. *Spine* 38(15): E952-e959.

Maryam Bagheri N, and Bahram A. (2018). Effect of Eight Weeks of Pilates training on Orexin and Insulin Resistance Levels in Overweight Children. *Yafteh*, Vol 20, Iss 1, Pp 112-122 (2018)(1), 112.

Mendes Tozim, B, and Tavella Navega M. (2018). Effect of pilates method on inspiratory and expiratory muscle strength in the elderly. / Efeito do método pilates na força dos músculos inspiratórios e expiratórios em idosos. *Brazilian Journal of Kineanthropometry & Human Performance*, 20(1), 1-9.

Mendonça TM, et al. (2013). Effects of Pilates exercises on health-related quality of life in individuals with juvenile idiopathic arthritis. *Arch Phys Med Rehabil* 94(11): 2093-2102. (Randomized Prospective Single-Blind Controlled Trial)

Mesquita LS, et al. (2015) Effects of two exercise protocols on postural balance of elderly women: a randomized controlled trial. *BMC Geriatr.* Jun 2:15:61.

Miyamoto GC, et al. (2011) The efficacy of the addition of the Pilates method over a minimal intervention in the treatment of chronic nonspecific low back pain: a study **protocol** of a randomized controlled trial. *Journal of Chiropractic Medicine* 10, 248-254.

Miyamoto GC, et al. (2013). Efficacy of the addition of modified Pilates exercises to a minimal intervention in patients with chronic low back pain: a randomized controlled trial. *Physical Therapy* 93(3): 310-320.

Miyamoto GC, et al. (2016) Effectiveness and Cost-Effectiveness of Different Weekly

Frequencies of Pilates for Chronic Low Back Pain: Randomized Controlled Trial. *Phys Ther.* Mar;96(3):382-9.

Montesano P & Mazzeo F. (2018). Pilates Improvement the Individual Basics of Service and Smash in Volleyball. *Sport Mont*, 16(3), 25-30.

Moreno-Segura, et al. (2018). The Effects of the Pilates Training Method on Balance and Falls of Older Adults: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Journal of Aging & Physical Activity*, 26(2), 327-344.

Mostagi, et al (2015). Pilates versus general exercise effectiveness on pain and functionality in non-specific chronic low back pain subjects. *J Bodywork Mov Ther* Oct;19(4):636-45. (Randomized Controlled Trial)

Natour J, et al. (2015). Pilates improves pain, function and quality of life in patients with chronic low back pain: a randomized controlled trial. *Clinical Rehabilitation* 29(1): 59-68.

Oksuz S, & Unal E. (2017). The effect of the clinical pilates exercises on kinesiophobia and other symptoms related to osteoporosis: Randomised controlled trial. *Complement Ther Clin Pract*, 26, 68-72.

Oliveira LC, et al. (2017). Pilates increases isokinetic muscular strength of the elbow flexor and extensor muscles of older women: A randomized controlled clinical trial. *J Bodywork Mov Ther*, 21(1), 2-10.

Quinn K, et al. (2011). Do patients with chronic low back pain benefit from attending Pilates classes after completing conventional physiotherapy treatment? *Physiotherapy Practice and Research* 32(1):5-12. (Randomized Controlled Trial)

Patti A, et al. (2016). Pain Perception and Stabilometric Parameters in People With Chronic Low Back Pain After a Pilates Exercise Program: A Randomized Controlled Trial. *Medicine (Baltimore)*, 95(2), e2414.

Pedriali FR, et al. (2016) Is Pilates as effective as conventional pelvic floor muscle exercises in the conservative treatment of post-prostatectomy urinary incontinence? A randomised controlled trial. *Neurourol Urodyn.* Jun;35(5):615-21.

Pinto JS, et al. (2015) Effectiveness of conventional physical therapy and Pilates' method in functionality, respiratory muscle strength and ability to exercise in hospitalized chronic renal patients: A study protocol of a randomized controlled trial. *J Bodyw Mov Ther*. Oct;19(4):604-15.

Rahimimoghadam, Z., et al. (2019). "Pilates exercises and quality of life of patients with chronic kidney disease." Complement Ther Clin Pract **34**: 35-40.

Rayes, A. B. R., et al. (2019). "The effects of Pilates vs. aerobic training on cardiorespiratory fitness, isokinetic muscular strength, body composition, and functional tasks outcomes for individuals who are overweight/obese: a clinical trial." <u>PeerJ</u> 7: e6022.

Roller M, et al. (2018). Pilates Reformer exercises for fall risk reduction in older adults: A randomized controlled trial. *J Bodywork Move Ther*, 22(4), 983-998.

Rosu MO, et al. (2014). Effects of Pilates, McKenzie and Heckscher training on disease activity, spinal motility and pulmonary function in patients with ankylosing spondylitis: A randomized controlled trial. *Rheumatol Int* 34(3): 367-372.

Rydeard R, et al. Pilates-based therapeutic exercise: effect on subjects with nonspecific chronic low back pain and functional disability: a randomized controlled trail. *Journal of Orthopedic and Sports Physical Therapy* 36:472-84.

Sarmento LA, et al. (2016). Effect of conventional physical therapy and Pilates in functionality, respiratory muscle strength and ability to exercise in hospitalized chronic renal patients: A randomized controlled trial. *Clin Rehabil*.

Sarmento LA, et al. (2017). Effect of conventional physical therapy and Pilates in functionality, respiratory muscle strength and ability to exercise in hospitalized chronic renal patients: a randomized controlled trial. *Clin Rehabil*, 31(4), 508-520.

Savkin R & Bas Aslan U. (2016). The effect of pilates exercise on body composition in sedentary overweight and obese women. *J Sports Med Phys Fitness*.

Sekendiz B, et al. (2007) Effects of Pilates exercise on trunk strength, endurance and flexibility in sedentary adult females. *J Bodywork Move Ther* Jan; 11: 318-26. (Randomized Controlled Trial)

Sener HO, et al. (2017). Effects of Clinical Pilates Exercises on Patients Developing Lymphedema after Breast Cancer Treatment: A Randomized Clinical Trial. *J Breast Health (2013)*, *13*(1), 16-22.

Silva, H. J. A., et al. (2019). "Mat Pilates and aquatic aerobic exercises for women with fibromyalgia: a protocol for a randomised controlled blind study." BMJ Open **9**(2): e022306.

Siqueira Rodrigues BG, et al. (2010) Pilates method in personal autonomy, static balance and quality of life of elderly females. *J Bodyw Mov Ther* Apr;14(2):195-202. (Randomized Controlled Trial)

Stolze LR, et al. (2012) Derivation of a Preliminary Clinical Prediction Rule for Identifying a Subgroup of Patients With Low Back Pain Likely to Benefit from Pilates-Based Exercise. *J Ortho Sport Phys Ther* May; 42(5):425-36.

Tolnai N, et al. (2016). Physical and psychological benefits of once-a-week Pilates exercises in young sedentary women: A 10-week longitudinal study. *Physiol Behav.* 163, 211-218.

Torelli L, et al. (2016). Effectiveness of adding voluntary pelvic floor muscle contraction to a Pilates exercise program: an assessor-masked randomized controlled trial. *Int Urogynecol J, 27*(11), 1743-1752.

Uluğ N, et al. (2018). Effects of Pilates and yoga in patients with chronic neck pain: A sonographic study. *J Rehabil Med*, *50*(1), 80-85.

Valenza MC, et al. (2016). Results of a Pilates exercise program in patients with chronic non-specific low back pain: A randomized controlled trial. *Clin Rehabil*. 31(6): 753-760.

Vécseyné MK, et al. (2013) Effects of Pilates and aqua fitness training on older adults' physical functioning and quality of life. *Biomedical Human Kinetics*. 5(1):22-27. (Randomized Controlled Trial)

Yu JH, et al. (2012) Effect of core stability training using Pilates on lower extremity muscle strength and postural stability in healthy subjects. *Isokinetics and Exercise Science* 20: 141-146. (Randomized Controlled Trial)

Zengin Alpozgen A, et al. (2016). Effectiveness of Pilates-based exercises on upper extremity disorders related with breast cancer treatment. *Eur J Cancer Care* (Engl).

Non-Randomized Controlled Trials (9)

Alves de Araújo MEA, et al. (2011) The effectiveness of the Pilates method: Reducing the degree of non-structural scoliosis, and improving flexibility and pain in female college students. *J Bodywork Move Ther* May 2011. (Non-Randomized Controlled Trial)

Bertoli J, et al. (2018). Effects of Mat Pilates on hip and knee isokinetic torque parameters in elderly women. *J Bodywork Move Ther*, 22(3), 798-804.

Curi VS, et al. (2018). Effects of 16-weeks of Pilates on health perception and sleep quality among elderly women. *Arch Gerontol Geriatr*, 74, 118-122.

Hwang Y, et al. (2016). Effects of Pilates Exercise on Salivary Secretory Immunoglobulin A Levels in Older Women. *J Aging Phys Act* 24(3): 399-406.

Hyun J, et al. (2014) The effects of Pilates mat exercise on the balance ability of elderly females. *J Phys Ther Sci* 26(2): 291-293. (Non-Randomized Controlled Trial)

Kliziene I, et al (2017). Effects of a 16-week Pilates exercises training program for isometric trunk extension and flexion strength. *J Bodyw Mov Ther*, 21(1), 124-132.

Kim G & PN HwangBo. (2016). Effects of Schroth and Pilates exercises on the Cobb angle and weight distribution of patients with scoliosis. *J Phys Ther Sci* 28(3): 1012-1015.

Lee HT, et al. (2016). Effect of mat pilates exercise on postural alignment and body composition of middle-aged women. *J Phys Ther Sci*, 28(6), 1691-1695.

Rogers K & Gibson AL (2009) Eight-Week Traditional Mat Pilates Training-Program Effects on Adult Fitness Characteristics. *Research Qtr Ex Sport* Sept; 80(3):569-574. (Non-Randomized Controlled Trial)

Descriptive, Observational and Pre-Post Design Studies (65)

Ahearn EL, Greene A, Lasner A. (2018). Some Effects of Supplemental Pilates Training on the Posture, Strength, and Flexibility of Dancers 17 to 22 Years of Age. *Journal of Dance Medicine & Science*, 22(4), 192-202.

Andrade LS, et al. (2015). Application of Pilates principles increases paraspinal muscle activation. *J Bodywork Move Ther* 19(1): 62-66.

Atilgan E, et al. (2017). Examining the postural awareness and flexibility changes in physical therapy students who took clinical Pilates class. *Pakistan Journal of Medical Sciences*, 33(3), 640-644.

Baillie, L., et al. (2019). "Predictors of functional improvement in people with chronic low back pain following a graded Pilates-based exercise programme." J Bodyw Mov Ther **23**(1): 211-218.

Barbosa AWC, et al. (2015). The Pilates breathing technique increases the electromyographic amplitude level of the deep abdominal muscles in untrained people. *J Bodywork Move Ther.* 19(1): 57-61.

Bergamin M, et al. (2015) Effects of a Pilates exercise program on muscle strength, postural control and body composition: results from a pilot study in a group of post-menopausal women. *Age (Dordr)*. Dec;37(6):118.

Bernardo LM. (2007) The effectiveness of Pilates training in healthy adults: An appraisal of the research literature. *J Bodywork Move Ther* 11(2): 106-110.

Bird ML, & Fell J. (2014). Positive long-term effects of Pilates exercise on the aged-related decline in balance and strength in older, community-dwelling men and women. *J Aging Phys Act* 22(3): 342-347.

Bo K, et al. (2011) Urinary incontinence among group fitness instructors including yoga and Pilates teachers. *Neurourol Urodyn* Mar;30(3):370-3.

Caldwell K, et al. (2009) Effect of Pilates and taiji quan training on self-efficacy, sleep quality, mood, and physical performance of college students. *J Bodywork Move Ther* 13: 155-63.

Cantergi D, et al. (2015) Muscle strategies for leg extensions on a Reformer apparatus. *J Electromyogr Kinesiol*. Apr;25(2):260-4.

Çelik D & Turkel N. (2015) The effectiveness of Pilates for partial anterior cruciate ligament injury. *Knee Surg Sports Traumatol Arthrosc*. Aug 1.

Coleman TJ, et al. (2015). Intra-abdominal pressure during Pilates: unlikely to cause pelvic floor harm. *Int Urogynecol J.*

Curi-Perez, et al. (2014) Analysis of activities in the daily lives of older adults exposed to the Pilates Method. *J Bodywork Move Ther* 18(3): 326-331.

Curnow D, et al. (2009) Altered motor control, posture, and the Pilates method of exercise prescription. *J Bodywork Move Ther* 13: 104-11.

Dos Santos NT, et al. (2017). Increased strength of the scapular stabilizer and lumbar muscles after twelve weeks of Pilates training using the Reformer machine: A pilot study. *J Bodyw Mov Ther*, 21(1), 74-80.

dos Santos, N. T. O., et al. (2019). "Respiratory muscle performance after 12 sessions of training using the apparatus Reformer of Pilates method." <u>Fisioterapia e Pesquisa</u> **26**(1): 58-64.

Dunleavy, K, et al. (2016). Comparative effectiveness of Pilates and yoga group exercise interventions for chronic mechanical neck pain: quasi-randomised parallel controlled study. *Physiotherapy* 102(3): 236-242.

Emery K, et al. (2010) The effects of a Pilates training program on arm-trunk posture and movement. *Clin Biomech* (Bristol, Avon). Feb;25(2):124-30.

Endleman I & Critchley DJ. (2008) Transversus abdominis and obliquus internus activity during Pilates exercises: measurement with ultrasound scanning. *Archives of Physical Medicine and Rehabilitation* 89(11): 2205-12.

English T, et al. (2007) The Effect of Pilates Exercise on Trunk and Postural Stability and Throwing Velocity in College Baseball Pitchers: Single Subject Design. North American Journal of Sports Physical Therapy: NAJSPT 2(1): 8-21.

Ferla L, et al. (2016) Comparison of the functionality of pelvic floor muscles in women who practice the Pilates method and sedentary women: a pilot study. *Int Urogynecol J.* Jan;27(1):123-8.

Garcia-Soidan JL, et al. (2014). Does Pilates Exercise Increase Physical Activity, Quality of Life, Latency and Sleep Quantity in Middle-Aged People? *Perceptual & Motor Skills* 119(3): 838-850.

Gaskell, L. and A. E. Williams (2019). "A qualitative study of the experiences and perceptions of adults with chronic musculoskeletal conditions following a 12-week Pilates exercise programme." <u>Musculoskeletal Care</u> **17**(1): 54-62.

Geremia JM, et al. (2015) Effect of a physical training program using the Pilates method on flexibility in elderly subjects. *Age (Dordr)*. Dec;37(6):119.

Giacomini MB, et al. (2016) The Pilates Method increases respiratory muscle strength and performance as well as abdominal muscle thickness. *J Bodyw Mov Ther*. Apr;20(2):258-64.

Hagner-Derengowska M, et al. (2015) Effects of Nordic Walking and Pilates exercise programs on blood glucose and lipid profile in overweight and obese postmenopausal women in an experimental, nonrandomized, open-label, prospective controlled trial. *Menopause*. Nov;22(11):1215-23.

Halis F, et al. (2016) Pilates for Better Sex: Changes in Sexual Functioning in Healthy Turkish Women After Pilates Exercise. *J Sex Marital Ther.* May 18;42(4):302-8.

Herrington L & Davies R. (2005) The Influence of Pilates Training on the Ability to Contract the Transversus Abdominis Muscle in Asymptomatic Individuals. *J Bodywork Move Ther* Volume 9, Issue 1, January 2005, Pages 52-57.

Hwang Y, et al. (2015) Effects of Pilates Exercise on Salivary Secretory Immunoglobulin A Levels in Older Women. *J Aging Phys Act.* Dec 14.

Kao YH, et al. (2015) Effects of a 12-week Pilates course on lower limb muscle strength and trunk flexibility in women living in the community. *Health Care Women Int.* 36(3):303-19. (Non-randomized controlled trial)

Klein GR, et al. (2007) Return to Athletic Activity after Total Hip Arthroplasty. J Arthroplasty 22(2):171-5.

Kolar P, et al. (2009) Analysis of Diaphragm Movement during Tidal Breathing and during its Activation while Breath Holding Using MRI Synchronized with Spirometry. *Physiol Res* 58: 383-92.

Küçük F & Livanelioglu A. (2015) Impact of the clinical Pilates exercises and verbal education on exercise beliefs and psychosocial factors in healthy women. *J Phys Ther Sci.* Nov;27(11):3437-43. (Non-randomized controlled trial)

Kuo YL, et al. (2009). Sagittal spinal posture after Pilates-based exercise in healthy older adults. *Spine* 34(10): 1046-1051.

Leopoldino AAO, et al. (2013) Effect of Pilates on sleep quality and quality of life of sedentary population *J Bodywork Move Ther* 17, 5e10.

Lynch JA, et al. (2009) Effect on performance of learning a Pilates skill with or without a mirror. *J Bodyw Mov Ther* Jul;13(3):283-90.

Marques NR, et al. (2013). EMG activity of trunk stabilizer muscles during Centering Principle of Pilates Method. *J Bodywork Move Ther* 17(2): 185-191.

Martínez RB. (2018). The Pilates Method in Physical Education. School Health Intervention Programme: Quality of Life, Physical Fitness and Postural Attitude of Secondary School Students in Cantabria. / El mètode Pilates a l'educació física. Efectes d'un programa d'intervenció en la salut escolar: qualitat de vida, estat físic i actitud postural d'estudiants d'ESO a Cantàbria. *Apunts: Educació Física i Esports*(131), 108-108.

Martins-Meneses DT, et al. (2015) Mat Pilates training reduced clinical and ambulatory blood pressure in hypertensive women using antihypertensive medications. *Int J Cardiol*. Jan 20;179:262-8. (Nonrandomized, controlled trial)

Menacho MO, et al. (2010) Electromyographic effect of mat Pilates exercise on the back muscle activity of healthy adult females. *J Manipul Physiol Therapeut* 33(9): 672-8.

Montuori S, et al. (2018). Functional Role of Internal and External Visual Imagery: Preliminary Evidences from Pilates. *Neural Plasticity*, *2018*, 7235872-7235872.

Newell D, et al. (2012) Changes in gait and balance parameters in elderly subjects attending an 8-week supervised Pilates programme. *J Bodywork Move Ther* Mar 2012.

Notarnicola A, et al. (2014) Daily Pilates exercise or inactivity for patients with low back pain: a clinical prospective observational study. *Eur J Phys Rehabil Med* 50(1): 59-66.

Oliveira N T, et al. (2017). Muscle activation during Pilates exercises in participants with chronic non-specific low back pain - a cross-sectional case control study. *Arch Phys Med Rehabil*. 98(1): 88-95.

Pâmela Maiara M, et al. (2018). Effectiveness of the Pilates method for individuals with nonspecific low back pain: clinical and electromyographic aspects. *Motriz: Revista de Educacao Fisica, Vol 23, Iss 4* (2018)(4).

Panhan AC, et al. (2018). Neuromuscular efficiency of the multifidus muscle in pilates practitioners and non-practitioners. *Complement Ther Med, 40*, 61-63.

Pata RW, et al. (2014) The effect of Pilates-based exercise on mobility, postural stability, and balance in order to decrease fall risk in older adults. *J Bodywork Move Ther* 18(3): 361-367.

Pereira ILR, et al. (2017). Trunk Muscle EMG During Intermediate Pilates Mat Exercises in Beginner Healthy and Chronic Low Back Pain Individuals. *J Manipulative Physiol Ther* 40(5): 350-357.

Rafaela Cristina AG, et al. (2018). Effects of resistance training, tai chi chuan and mat pilates on multiple health variables in postmenopausal women. *Journal of Human Sport and Exercise, Vol 0, Iss 0* (2018)(0).

Roh SY. (2016a). The effect of 12-week Pilates exercises on wellness in the elderly. *J Exerc Rehabil*, 12(2), 119-123.

Roh SY. (2016b). An exploration of implications for the development of Pilates instructor system through identification of instructors' difficulties. *J Exerc Rehabil*, *12*(4), 355-362.

Queiroz BC, et al. (2010) Muscle activation during four Pilates core stability exercises in quadruped position. *Arch Phys Med Rehabil* Jan;91(1):86-92.

Segal NA, Hein J, Basford JR. (2004) The effects of Pilates training on flexibility and body composition: an observational study. *Arch Phys Med Rehabil* 85(12):1977-81; Dec 2004.

Seghatoleslami A, et al. (2018). The impact of Pilates exercises on motor control of inactive middle-aged women. *Sleep and Hypnosis*, *20*(4), 262-266.

Sharma D, et al. (2018). Efficacy of Pilates based mat exercise on quality of life, quality of sleep, and satisfaction with life in type 2 diabetes mellitus. *Romanian Journal of Diabetes Nutrition & Metabolic Diseases*, 25(2), 149-156.

Silva GB, et al. (2015) Electromyographic activity of rectus abdominis muscles during dynamic Pilates abdominal exercises. *J Bodyw Mov Ther.* Oct;19(4):629-35.

Stieglitz DD, et al. (2016) Equipment-based Pilates reduces work-related chronic low back pain and disability: A pilot study. *J Bodyw Mov Ther*. Jan;20(1):74-82.

Tinoco-Fernandez M, et al. (2016). The Pilates method and cardiorespiratory adaptation to training. *Res Sports Med*, 24(3), 281-286.

van Hilst J, et al. (2015) Low back pain in young elite field hockey players, football players and speed skaters: Prevalence and risk factors. *J Back Musculoskelet Rehabil*. 28(1):67-73.

Vaquero-Cristóbal R, et al. (2015) The effects of 16-weeks Pilates mat program on anthropometric variables and body composition in active adult women after a short detraining period. *Nutr Hosp.* Apr 1;31(4):1738-47. doi: 10.3305/nh.2015.31.4.8501. (Spanish)

Vaquero-Cristobal R., et al. (2016). The effects of a Reformer Pilates program on body composition and morphological characteristics in active women after a detraining period. *Women Health* 56(7): 784-806.

von Sperling de Souza M & Brum Vierra C. (2006) Who are the people looking for the Pilates method? *J Bodywork Move Ther* Volume 10, Issue 4, Pages 328-334.

Werba DD, et al. (2017). Electrical Activity of Powerhouse Muscles During the Teaser Exercise of Pilates Using Different Types of Apparatus. *Percept Mot Skills*, *124*(2), 452-461.

Yu KK, et al. (2015). Interrater reliability of a Pilates movement-based classification system. *J Bodywork Move Ther* 19(1): 160-176.

Case Reports (8)

Blum CL. (2002) Chiropractic and Pilates therapy for the treatment of adult scoliosis. *Journal of Manipulative and Physiological Therapeutics* Vol 25 (4)May 2002, pp 1-15.

Dos Santos AN, et al. (2016). Pilates improves lower limbs strength and postural control during quite standing in a child with hemiparetic cerebral palsy: A case report study. *Dev Neurorehabil* 19(4): 226-230.

Keays KS, et al (2008) The effects of Pilates exercises on shoulder range of motion, pain, mood, and upper-extremity function in women living with breast cancer. A pilot study. *Physical Therapy* Vol. 88(4):494-510.

Levine B, et al. (2009) Pilates Training for Use in Rehabilitation after Total Hip and Knee Arthroplasty: A Preliminary Report. *Clin Orthop Relat Res* 467:1468-75.

Moon JH, Hong SM, Kim CW, Shin YA. (2015) Comparison of deep and superficial abdominal muscle activity between experienced Pilates and resistance exercise instructors and controls during stabilization exercise. *J Exerc Rehabil.* Jun 30;11(3):161-8. (Retrospective Case-Control Study)

Oliveira LC, et al. (2016) Effects of the Pilates method on variables related to functionality of a patient with traumatic spondylolisthesis at L4-L5: A case study. *J Bodyw Mov Ther*. 2016 Jan;20(1):123-31

Stivala A, and Hartley G. (2013). The Effects of a Pilates-Based Exercise Rehabilitation Program on Functional Outcome and Fall Risk Reduction in an Aging Adult Status-Post Traumatic Hip Fracture due to Fall. *J Geriatr Phys Ther* Nov 25.

Yang YM, et al. (2010) Spontaneous diaphragmatic rupture complicated with perforation of the stomach during Pilates. *Americ Jour Emerg Med* 28:259.e1-259.e3.

Expert Opinions and Editorials(16)

Anderson BA, Spector A. (2000) Introduction to Pilates-Based Rehabilitation *Orthopedic PT Clinics of North America* 9:3, Sept 2000, pp. 395-410.

Beck BR, et al. (2017). Exercise and Sports Science Australia (ESSA) position statement on exercise prescription for the prevention and management of osteoporosis. *J Sci Med Sport*. 20(5): 438-445.

Bernardo LM. (2007). The effectiveness of Pilates training in healthy adults: An appraisal of the research literature. *J Bodywork Move Ther* 11:106-10.

Betz SR. (2005) Modifying Pilates for Osteoporosis. IDEA Fitness Journal April; pp. 47-55.

Betz SR. (2015) Are Pilates and yoga right for clients with low bone density? *IDEA Fitness Journal* Sept; pp. 80-84.

Cozen DM. (2000). Use of Pilates in foot and ankle rehabilitation. *Sports Medicine and Arthroscopy Review* 8 (4), 395-403.

Dugan SA, et al. (2016). A Multimethod Investigation into Physical Activity in Midlife Women. *J Phys Act Health*: 1-25.

Hita-Contreras F, et al. (2016). Fall prevention in postmenopausal women: the role of Pilates exercise training. *Climacteric* 19(3): 229-233.

Kelly OJ & JC Gilman. (2017). Can Unconventional Exercise be Helpful in the Treatment, Management and Prevention of Osteosarcopenic Obesity? *Curr Aging Sci* 10(2):106-121.

Levine B, et al. (2007) Rehabilitation after total hip and knee arthroplasty: a new regimen using Pilates training. *Bull NYU Hosp Jt Dis* 65(2):120-5.

McNeill W. (2011) Decision making in Pilates. J Bodywork Move Ther 15:103-7.

McNeill W, et al. (2018). The Pilates client on the hypermobility spectrum. *J Bodywork Move Ther* , 22(1), 209-216.

Muscolino JE, Cipriani S. (2004) Pilates and the "powerhouse" – I. J Bodywork Move Ther 8:15-24.

Muscolino JE, Cipriani S. (2004) Pilates and the "powerhouse" – II. J Bodywork Move Ther 8:122-130.

Niehues JR, Gonzáles I, Lemos RR, Haas P. Pilates Method for Lung Function and Functional Capacity in Obese Adults. *Altern Ther Health Med*. 2015 Sep-Oct;21(5):73-80. (Literature Review)

Sorosky S, et al. (2008) Yoga and Pilates in the management of low back pain. (Literature Review) *Current Review Musculoskeletal Medicine* 1:39-47.