## Appendix C1. Citation details of studies from search results excluded [Bowen therapy]

Study	Reference	Reason, text only
Marr 2008	Marr, M.; Lambon, N.; Baker, J. Effects of the Bowen technique on flexibility levels: implications for fascial plasticity. Journal of Bodywork & Movement Therapies. 2008; 12(4) 388-388. doi: 10.1016/j.jbmt.2008.04.006	Participants: study includes only healthy participants
Bimal Kumar 2018	Bimal Kumar, J Effect of Bowen Technique Versus Muscle Energy Technique on Asymptomatic Subjects with Hamstring tightness. Nandha College of Physiotherapy. 2018.	Publication type: clearly ineligible
Morris 2012	Morris, Michael Fredric The Bowen Technique and low back pain: a pilot study to investigate the use of the Bowen Technique as a treatment for people who live with chronic, non-specific LBP. University of Warwick. 2012.	Publication type: clearly ineligible
Stomski 2018	Stomski, N. J.; Petterson, A.; Kristjanson, L.; Lobb, E. A.; Phillips, M.; Williams, A.; Morrison, P.; Joske, D. The effect of self-selected complementary therapies on cancer patients' quality of life and symptom distress: A prospective cohort study in an integrative oncology setting. Complementary therapies in medicine. 2018; 37() 1-5. doi: https://dx.doi.org/10.1016/j.ctim.2018.01.006	Study design: clearly ineligible

## Appendix C2. Citation details of studies from submissions (Bowen therapy)

A: awaiting classification B: excluded at title & abstract

C: excluded at full-text

D: eligible studies

Reference	Retrieved by search?	Classification
Chen PY. Effectiveness of Bowen Therapy for Pain Management in Patients With Fibromyalgia. Clinical Trial recruitment underway - Chinese University of Hong Kong. 2020.	No	A: identified in our registry records NCT04554784; no published report identified
Tsz A, Lee M, Lun C, Ying A, Chen PY, Chi Hong D, Samy W, Au F. A Prospective Randomized Control Trial on the Effectiveness of Bowen Therapy for Myofascial Neck Pain. Accepted at conference and publication but postponed due to COVID. 2020.	No	A: unable to be retrieved (conference abstract)
Whitaker JA, Gilliam PP, Seba DB. The Bowen technique: a gentle hands-on method that affects the autonomic nervous system as measured by heart rate variability and clinical assessment. American Academy of Medicine . 1997; 32nd Annual.	No	A: unable to be retrieved (conference abstract)
Dicker A. Using Bowen technique in a health service workplace to improve the physical and mental wellbeing of staff. The Australian Journal of Holistic Nursing. 2005; 12 (2)35-42.		B: case series
Duncan B et al. Improved motor function with Bowen therapy for rehabilitation in chronic stroke: a pilot study. Journal of Primary Health Care. 2011; 3(1)53-57.	Yes	B: case series
Morgan-Jones M, Knott F, Wilcox H, Ashwind C. A pilot study of fascia Bowen therapy for 8-11 year-old boys with developmental coordination disorder. Journal of Bodywork and Movement Therapies. 2019; 23(3)568-574.	Yes	B: case series
Nitsure P, Kothari, N. The effectiveness of Bowen Technique as an adjunct to conventional physiotherapy on pain and functional outcomes in subject with acute trapezitis - A pilot study. Romanian Journal of Physical Therapy. 2015; 21(36)44505.	Yes	B: case series
Félix CJS, Black L, Rodrigues M, Silva AG. The acute effect of Bowen therapy on pressure pain threshold and postural sway in healthy subjects'. Journal of Bodywork and Movement Therapies. 2017; 21(4)804-809. doi: 10.1016/j.jbmt.2016.12.008	Yes	B: ineligible population
Marr M et al. The effects of the Bowen Technique on hamstring flexibility over time: a randomised controlled trial'. Journal of Bodywork and Movement Therapies. 2011; 15(3)281-90. doi: 10/1016/j.jbmt.2010.07.008	Yes	B: ineligible population
Walker-McPhail D. Implementing Bowen therapy on SCI patients with limb discrepancy. Journal of Bodywork and Movement Therapies. 2015; 19(4)675-676. doi: 10.1016/j.jbmt.2015.07.017	Yes	B: ineligible publication type
Wilks, J. The Bowen technique - mechanisms for action. Journal of the Australian Traditional-Medicine Society. 2013; 19(1) 33-35.	Yes	B: ineligible publication type
Yadav, SK. COMPARATIVE STUDY BETWEEN THE EFFECTIVENESS OF BOWEN TECHNIQUE AND DYNAMIC SOFT TISSUE MOBILIZATION IN INCREASING HAMSTRING FLEXIBILITY. 2013.	No	B: ineligible publication type
Dicker A. Bowen techniqueits use in work related injuries. The Australian Journal of Holistic Nursing. 2005; 12(1)31-34	Yes	B: narrative report of health promotion project
Dicker A. Using Bowen Therapy to improve staff health. The Australian Journal of Holistic Nursing, 01 Apr 2001. 2001; 8 (1)38-42.	Yes	B: narrative report of health promotion project
Argenbright C, Taylor-Piliae R, Loescher L. Bowenwork for symptom management of women breast cancer survivors with lymphedema: A pilot study. Journal of Bodywork and Movement Therapies. 2016; 25()142-149.	Yes	B: no comparator group
Gustafson, S. Bowenwork®An effective therapeutic intervention? A Systematic Review.  Journal of Alternative and Complementary Medicine. 2014; 17(11).	No	B: systematic review
Hansen C, Taylor-Piliae R. What is Bowenwork®? A Systematic Review . The Journal of Alternative and Complementary Medicine. 2011; 17(11). doi: https://doi.org/10.1089/acm.2010.0023	Yes	B: systematic review
Espejo-Antúneza L, López-Miñarrob PA, Albornoz-Cabelloc M, Garrido-Ardilaa EM.  Acute effect of electrical muscle elongation and static stretching in hamstring muscle extensibility. Science and Sports. 2016; 31(1)e1-e7.	No	C: ineligible population
Kage V, Bootwala F, Kudchadkar G. Effect of Bowen Technique versus Muscle Energy Technique on Asymptomatic Subjects with Hamstring Tightness: a Randomized Clinical Trial'. International Journal of Medical Research & Health Sciences. 2017; 6(4)102-108.	No	C: ineligible population
Kweku Seya A, Hunterb J. Finding the value in oncology massage: A mixed-method study of cancer services and survivors in Australia. Advances in Integrative Medicine. 2020; 7(3)126-134.	No	C: ineligible study design

Reference	Retrieved by search?	Classification
Kopczyska E, Malak R, Kostiukow A, Samborski W. Bowen Technique for patients with	No	C: no comparator group
low back pain. World Scientific News. 2018; 93()81-94.		
Dalal P, Kage V. Comparison of Ischaemic Compression, Myofascial Release and	No	D: included at Extraction
Bowens Technique In Non Specific Neck Pain-A Randomized Clinical Trial. Indian Journal		
of Applied Research. 2020: 10(1)25-28. doi: 10.36106/iiar		
Lee K, Lewis GN. Short term relief of multisite chronic pain with Bowen Therapy: A	Yes	D: included at Extraction
double-blind, randomized controlled trial'. Journal of Bodywork and Movement		
Therapies. 2020; 24(4)271-279. doi: 10.1016/i.jbmt.2020.06.025		

## Appendix C3. Citation details of studies awaiting assessment Bowen therapy

Study ID	Reference	Reason for awaiting assessment
	Malancravean M, Papp E. Experimental study about the rotating movements through Bowen therapy. Acta Medica Marisiensis. 2017; 63()	reported in abstract only

## Appendix C4. Characteristics of ongoing studies

[see Appendix I for Abbreviations used in the report]

NCT05392049

[BOR-013-S]

Title:

Effects of Bowen's Therapy and Post Isometric Relaxation Techniques in Patients of Temporomandibular Joint Disorder

Country:

India

Population:

Chronic MSK conditions

ICD code:

DA0E.8 Temporomandibular joint disorder

No. participants:

24

Inactive comparators:

**Active comparators:** post isometric relaxation

Outcomes:

pain (NPRS); functional activity (Jaw Functional Limitation Scale); range of motion (intra-oral ruler) **Enrolment start:** 

01 Jun 2022

**Enrolment end:** 

NR

Status:

Last registry update: 23 May 2022

NR

Study completion:

Not yet recruiting

NCT05723029

[BOR-020-S]

Title:

Bowen Technique and Post Isometric Relaxation in Knee Osteoarthritis Patients

Country:

India

Population:

Chronic MSK conditions

ICD code:

FA01.0 Primary osteoarthritis of knee (+ hamstring tightness)

No. participants:

20

**Inactive comparators:** 

Active comparators: post isometric relaxation

Outcomes:

pain (NPRS); knee range of motion (active knee extension test, goniometer)

**Enrolment start:** 18 Jan 2023

**Enrolment end:** 

NR

Status: Completed Study completion: 31-Mar-23

Last registry update:

18 Apr 2023

NCT04852939

[BOR-012-S]

Title:

Bowen's Technique in Patients With Adhesive Capsulitis

Country:

India

Title:

Population:

Chronic MSK conditions

ICD code:

FB53.0 Adhesive capsulitis of shoulder

No. participants:

74

**Inactive comparators:** 

**Active comparators:** physical therapy

**Outcomes:** 

pain (NPRS, SPADI-pain); function (SPADI-function);

range of motion (goniometer)

14 Oct 2020 **Enrolment end:** 

NR

**Enrolment start:** 

Status:

Completed

Study completion:

10-Jul-21 Last registry update:

06 Aug 2021

NCT04852913

[BOR-024-S]

Bowen's Technique In Postural Neck Pain Among Dentist

Country: Pakistan

Population:

Chronic MSK conditions

ICD code:

ME84.0 Cervical spine pain

No. participants:

58

**Inactive comparators:** 

**Active comparators:** 

conventional physical therapy (myofascial release + active RoM exercises)

Outcomes:

pain intensity (NRS); disability (NDI); craniovertebral angle (goniometer)

**Enrolment start:** 17 Oct 2020

**Enrolment end:** 15-Jun-21

Status: Completed Study completion: 10-Jul-21

Last registry update:

06 Aug 2021

NCT05751070

[BOR-021-S]

Title:

Bowen and Graston Technique in Patients of Tension Neck Syndrome

Country: India

Population:

Chronic MSK conditions

ICD code:

ME84.0 Cervical spine pain (myofascial)

No. participants:

26

**Inactive comparators:** 

**Active comparators:** Graston technique

**Outcomes:** 

pain (NPRS); disability (NDI); range of motion

(goniometer)

**Enrolment start:** 

16 Mar 2023

**Enrolment end:** NR

Status: Completed Study completion:

26-Dec-23

Last registry update:

27 Dec 2023

Study completion:

IRCT20190717044238N7

[BOR-009-S]

Title:

Bowen therapy and tennis ball technique in patients with thoracic myofascial pain syndrome

Country: Pakistan

Population:

Chronic MSK conditions

ICD code:

ME84.1 Thoracic pain myofascial

No. participants:

30

Inactive comparators:

**Active comparators:** tennis ball technique

**Outcomes:** 

pain (NPRS); functional disability (Pain Disability

Questionnaire)

**Enrolment start:** 

01 Mar 2023

Enrolment end: 9-Jun-23

Status:

Completed

update: 19 Aug 2023

Last registry

9-Jun-23

IRCT20230426057994N1

[BOR-010-S]

Title:

METS vs Bowen technique in hamstring muscle tightness

Country:

Pakistan

Population:

Chronic MSK conditions

ICD code:

MG30.02 Chronic primary low back pain

No. participants:

31

**Inactive comparators:** 

**Active comparators:** muscle energy technique

**Outcomes:** 

pain (NPRS); disability (Oswestri Low Back Disability Index); active knee extension test (goniometer)

**Enrolment start:** 05 Aug 2023

**Enrolment end:** 

1-Dec-23

Status: Completed Study completion:

18-Dec-23 Last registry

update: 07 Aug 2023

CTRI/2023/01/049120

[BOR-019-S]

Title:

Immediate effect of Bowen Technique Versus Mulligan Bent Leg Raise on pain and hamstring muscle flexibility among young boys with non-specific low back pain

Country: India

Population:

Chronic MSK conditions

ICD code:

MG30.02 Non-specific chronic low back pain

No. participants:

NR

**Inactive comparators:** 

Active comparators:

Mulligan Bent Leg Raise

Outcomes:

pain (NPRS); sit and reach test; popliteal angle

**Enrolment start:** 20 Jan 2023

**Enrolment end:** 

NR Status:

Can't determine

Study completion:

NR Last registry

update: 17 Jan 2023 NCT04745858 [BOR-011-S] Title: Bowen's Technique and Muscle Energy Technique on Hamstrings **Tightness** Country: India NCT04861129 [BOR-016-S] Title: Bowen Therapy for Chronic Non-specific Low Back Pain Country:

ICD code:

MG30.02 Non-specific chronic low back pain

No. participants: 46

**Inactive comparators:** 

**Active comparators:** Muscle energy technique

**Outcomes:** 

pain (NPRS), popliteal angle (active knee extension test), sit and reach test, active straight leg raise; range of motion (goniometer)

**Enrolment start:** 25 Jan 2021 **Enrolment end:** 

NR

NR

Status:

Status:

Completed

Study completion: 15-Aug-21 Last registry update:

20 Sep 2021

Hong Kong

Population: Inactive comparators: Chronic MSK conditions sham Bowen therapy

**Active comparators:** 

Outcomes: pain relief (NRS); disability (ODI); HR-QoL (SF-12); [pain] self-efficacy (Pain Self-efficacy Questionnaire) **Enrolment start:** Study completion: 19 Apr 2021 NR

Last registry update:

27 Apr 2021 Can't determine

NCT05935163

[BOR-022-S]

Title:

Immediate Effects of Bowen Technique Versus Dynamic Soft Tissue Mobilization on Hamstrings Tightness in Chronic Non-specific Low Back Pain

Country: Pakistan

Population:

Population:

ICD code:

24

low back pain

No. participants:

Chronic MSK conditions

MG30.02 Non-specific chronic

Chronic MSK conditions

ICD code: MG30.02 Non-specific chronic low back pain

No. participants: 42

Inactive comparators:

**Active comparators:** physical therapy + dynamic soft tissue mobilisation

Outcomes:

pain (NPRS); disability (RMDQ); knee extension test, active straight leg raise, sit-and-reach test

Enrolment start: 01 Jan 2023

**Enrolment end:** 

**Enrolment end:** NR

Status: Recruiting Study completion:

NR

Last registry update: 07 Jul 2023

NCT05074641

[BOR-017-S]

Title:

Comparison Of Direct Myofascial Release And Bowen's Technique For Non-Specific Neck Pain

Country: India

Population:

Chronic MSK conditions

ICD code:

MG30.02 Non-specific chronic neck pain

No. participants:

30

**Inactive comparators:** 

**Active comparators:** myosfascial release

**Outcomes:** 

pain (NPRS); disability (NDI); stress, depression and anxiety (DASS); cervical range of motion (goniometer) Enrolment start: 05 Feb 2021

**Enrolment end:** NR

Status: Completed Study completion:

20-Jan-22 Last registry update: 02 Feb 2022 NCT05125484

[BOR-018-S]

Title:

Comparison of Bowen's Technique and Myofascial Release Technique On Pain And Disability in Trapezitis

Country:

Pakistan

Population:

Chronic MSK conditions

ICD code:

NA61.0 Strain or sprain of muscle, fascia or tendon at neck level (trapezitis)

No. participants:

66

**Inactive comparators:** 

**Active comparators:** 

myofascial release technique

**Outcomes:** 

pain (NPRS); disability (NDI); Isometric Scapular Pinch Test, Lateral Scapular Slide Test; cervical range of

motion (6 directions)

**Enrolment start:** 

16 Nov 2021

**Enrolment end:** 

NR Status:

Completed

Study completion:

1-Feb-22

Last registry update:

05 Apr 2022

NCT05969912

[BOR-014-S]

Title:

Effects of Instrument Assisted Soft Tissue Mobilization and Bowen Technique in Fibromyalgia

Country:

India

Population:

Chronic MSK conditions, Other chronic pain

ICD code:

MG30.01 Chronic widespread pain; MG30.02 Non-specific chronic low back pain

No. participants:

32

Inactive comparators:

**Active comparators:** 

Graston technique (instrument-assisted soft tissue mobilisation)

**Outcomes:** 

pain (NPRS); depression (CUDOS); quality of life (Fibromyalgia Impact Questionnaire); range of motion (bubble inclinometer)

**Enrolment start:** 

30 Aug 2023

Enrolment end:

30-Mar-24

Status:

Recruiting

Study completion: NR

Last registry update:

05 Sep 2023

CTRI/2020/04/024551 [Ughreja 2023]

[BOR-008-S]

Title:

Effect of exercises on sleep in fibromyalgia syndrome

Ughreja RA, Venkatesan P, Gopalakrishna DB, Singh YP. Effectiveness of Craniosacral therapy, Bowen therapy, static touch, and standard exercise program on sleep quality in fibromyalgia syndrome: A protocol for a randomized controlled trial. European Journal of Integrative Medicine. 2023;60:102254.

Country:

India

Population:

Other chronic pain

ICD code:

MG30.01 Chronic widespread pain

No. participants:

132

**Inactive comparators:** 

**Active comparators:** 

craniosacral therapy; static touch; standard exercise program

**Outcomes:** 

sleep quality (PSQI); quality of life (Revised Fibromyalgia Impact Questionnaire); fatigue (MAF); physical function (PROMIS-Physical Function-SF); pressure pain threshold (algometer)

**Enrolment start:** 

01 Jul 2020

**Enrolment end:** 

Feb-23

Status: Can't determine Study completion:

NR

Last registry update:

NCT04554784

[BOR-015-S]

Title:

Effectiveness of Bowen Therapy for Pain Management in Patients With Fibromyalgia

Country: Hong Kong Population:

Other chronic pain

ICD code:

MG30.01 Chronic widespread pain

No. participants:

80

Inactive comparators:

Active comparators: conventional treatments

Outcomes:

pain (NRS, BPI-SF); anxiety and depression (HADS); sleep (JSEQ); health-related quality of life (SF-36); lower and upper extremity strength (endurance

strength test)

Enrolment start:

6-Dec-22

06 Sep 2020 Enrolment end:

NR Last registry update:

Study completion:

**Status:** 16 Feb 2022 Can't determine