

Asthma

A dissertation submitted in partial fulfilment of the requirements of Jing Institute of Clinical Massage Therapy for the Professional Diploma in Advanced Clinical Massage and Sports Massage

March 2024



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**Evaluating the effects of the Jing methodTM of
Advanced Clinical Massage Therapy
on adults with asthma**

“I certify that this work has not been accepted in substance for any degree and is not concurrently being submitted for any degree other than that of the Diploma in Advanced Clinical Massage and Sports Massage being studied at Jing Institute Advanced Clinical Massage Therapy. I also declare that this work is the result of my own investigations except where otherwise identified by references and that I have not plagiarised the work of others”.

Mrs Lucia Lloyd-Clokie: _____

Date: 10th March 2024

Creativity Page

Learn

Teach

Love



When there's a mountain to climb, surround yourself with good people.

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Abstract

In this study, Jing massage therapy has been shown to have beneficial effects on adults with asthma. Research shows that anxiety is a factor in aggravating asthma symptoms. Massage can reduce anxiety. From the five participants that took part in the research over 16 weeks, the results were positive. A 4% increase in PEF (Peak Expiratory Flow), a 6.9% increase in asthma control, and a 20% decrease in anxiety symptoms. These figures add to the growing body of evidence which support massage to be considered as part of an asthma treatment program, and for reducing symptoms of anxiety.

Method

This small-scale study focuses on 5 adults over 18 years with asthma. Those that met the inclusion criteria were asked to complete 2 questionnaires, the ACT (Asthma Control Test) and the GAD-7 (General Anxiety Disorder), and take PEF readings for weeks 5, 6, 11 and 12. This study provided 5 hands on and 1 self-care session to adults with asthma. Self-care was online and videoed and emailed for participants to repeat 3 x a week. The sets of data collected from the questionnaires and PEF readings over the 16-week period for asthma control, severity of anxiety and peak exploratory flow, were represented in bar charts and linear scales.

Results

This study showed a 6.9% average increase in asthma control, a 4% increase in PEF readings, and a 20% decrease in anxiety symptoms.

Conclusion

The Jing Method™ is beneficial for adult asthmatics, and adults with anxiety. More studies with a larger sample size would give the benefits of the Jing massage programme more validity. Therefore, more research is warranted.

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Tables and Figures

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Table 1. Method Timetable

Week	ACT and GAD-7	PEF	Treatment	Self-care x 3pw and inform researcher
1	Y			
2	Y			
3	Y			
4	Y			
5	Y	Y		
6	Y	Y		
7	Y		Y	
8	Y		Y	
9	Y		Y	
10	Y		ONLINE	Y
11	Y	Y	Y	Y
12	Y	Y	Y	Y
13-15	-			
16	Y			

Table 2. Protocol used during Intervention period of study, weeks 7-12

Prone	Breath observations MFR X hand stretch Massage lamina groove Strip posterior-lateral ribs Serratus posterior superior Quadratus lumborum *If client has mucus Re observe breath	Observe client; bring their awareness to restricted area. Work using rabbit paw hands Work from opposite side, intercostals Release trigger points Release any trigger points *Add tapotement: hacking, cupping, chopping Volume, rhythm, and depth of breath
Sidelying	Clear iliac crest Work lateral line of body Work serratus anterior Anterior QL Subclavius – wait and hold	Work from medial to lateral Mould hands and glide up towards shoulder girdle Lift arm to work upper fibres under armpit. Use fingertips for subscapularis and serratus anterior. Replace clients arm. Mobilise scapula. Wait and hold for release. Client can drop hip away (lengthen leg and take it back to aid release). Or cross fibre friction
Sidelying cont.	Freeing costovertebral joints Lateral breath compressions	Push me/Pull you action: push shoulder away and draw costovertebral spines towards you Mould hands over ribs laterally and apply gentle pressure to encourage greater exhalation and provide resistance on inhalation.
Supine	Sternum and chest MFR x hand stretch Ribs- opposite side of table Subclavius Pectoralis major	Hand over hand on sternum With palms, paddy paw chest, alternating sides Over chest area CDP – circular digital pressure down sternum Laterally work intercostal spaces Work intercostal spaces, medial to lateral Strip (client allow arm to lower off table if poss.) Strip from medial to lateral, broad/heel of hand
	Pectoralis minor w. movement Scalene release Diaphragm Bouncy castle technique Breath compressions	Kneel, reach for pec mn. client backstroke arm Seated, palpate under SCM, locate scalenes, ask client to turn head to opposite side. From side - Gently compress the ribs with one hand and use other to curl fingers under the costal edge to release diaphragm. Static /x fibre Assess viscoelasticity of anterior ribs, upper and lower portions, left and right. Use MFR compression and torquing to release. Re assess portions. Apply gentle pressure to encourage greater exhalation and provide resistance on inhalation.

Abdomen	Place hand on abdomen MFR work Work abdomen Rectus abdominus Finishing	Be grounded, feel for any pull towards visceral restrictions. Use x hand stretch, skin rolling or transverse plane releases on restricted viscera. Palms on abd. Fingers pointing to left side, create a wave motion w. left palm, then fingers, transferring to right fingers, then palm. Stripping w supported fingers, releasing any trigger points. Draw client's attention to the breath.
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Figure 2. Weekly Average ACT Scores

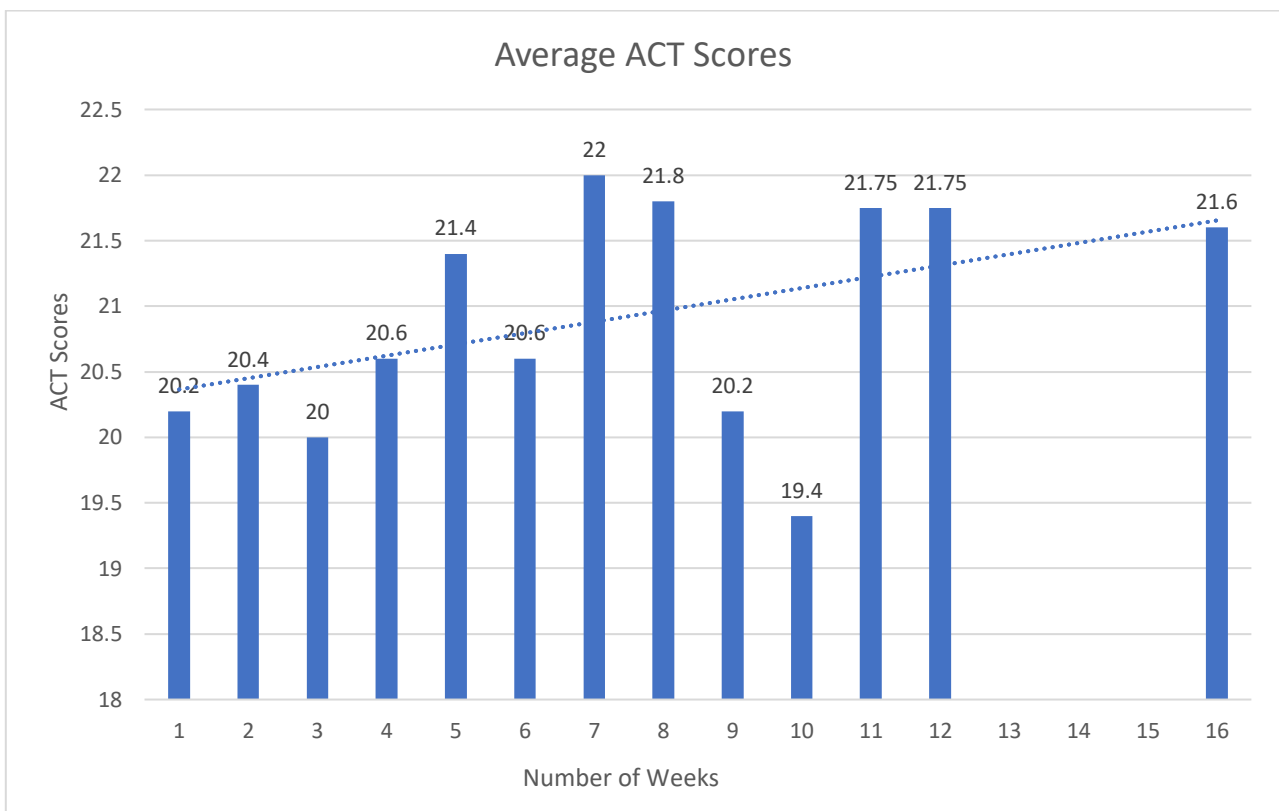


Figure 3. Weekly Average GAD-7 Scores

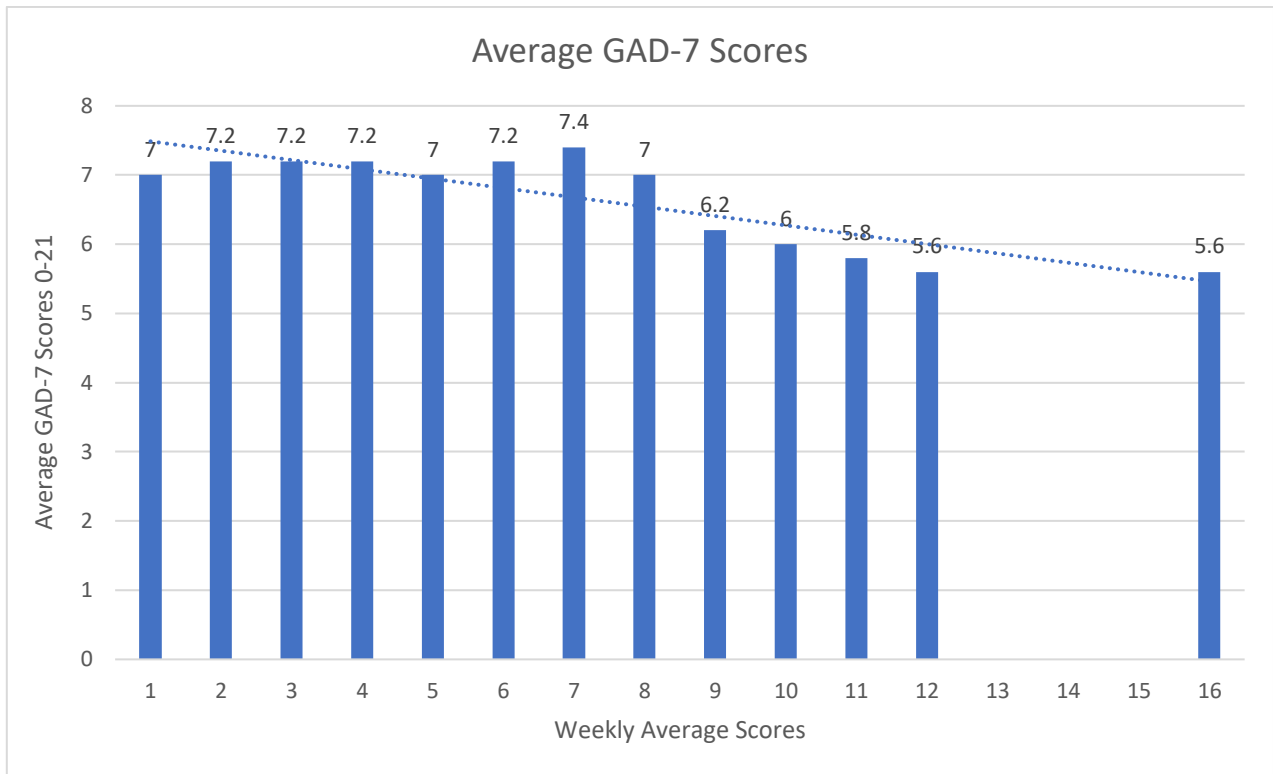
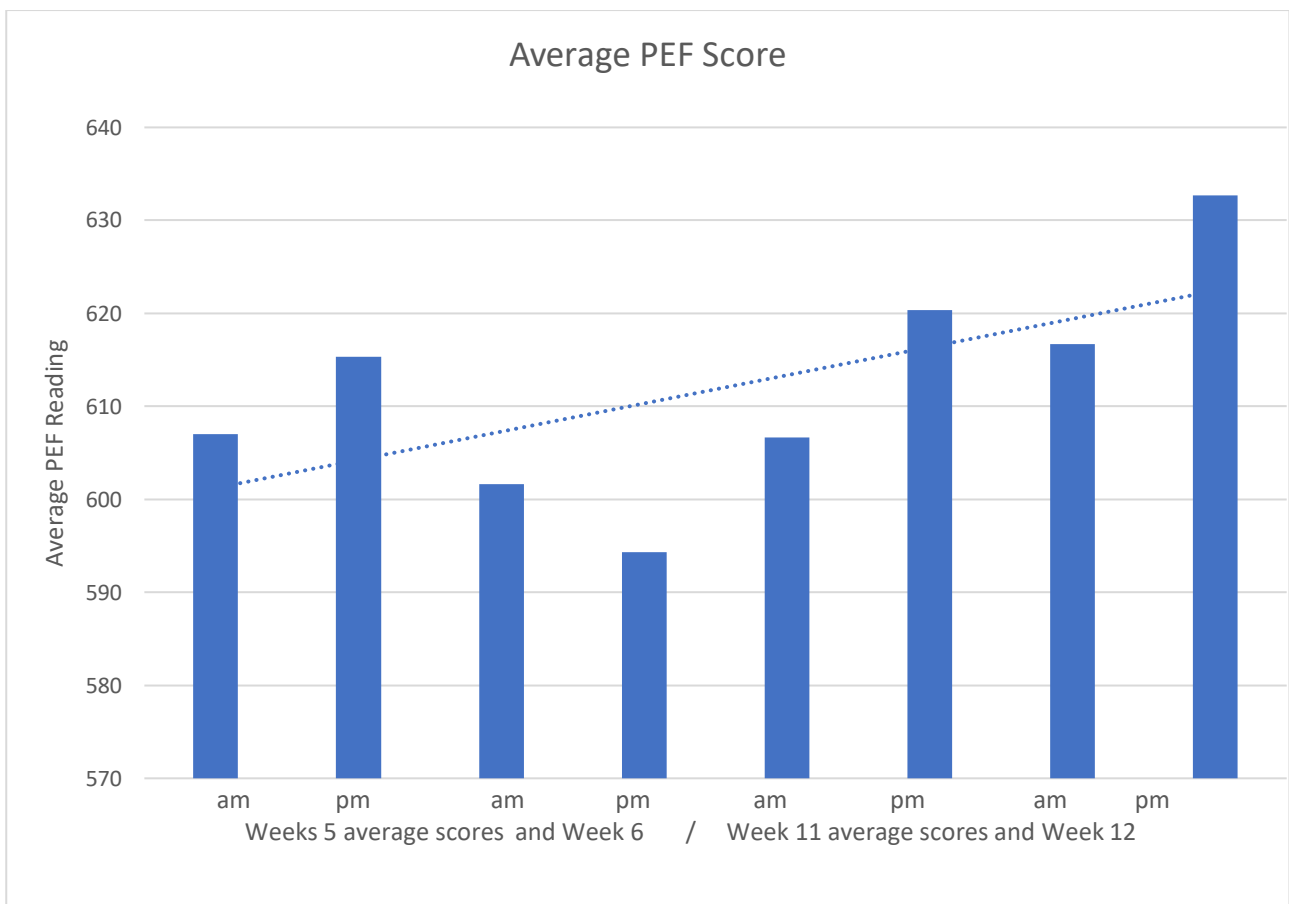


Figure 4. Average PEF Scores for am and pm taken during weeks 5, 6, 11 and 12



Abbreviations

ABD - Abdomen

ACT – Asthma Control Test

CAM – Complementary and Alternative medicines

CDP – Circular Digital Pressure

DB – Dysfunctional Breathing

FEV1 – Forced Expiratory Volume

FVC – Forced Vital Capacity

GAD-7 – General Anxiety Disorder questionnaire

GINA – Global Initiative for Asthma

LPM – Litres Per Minute

MFR – Myofascial Release

NICE – National Institute for Health and Care Excellence

PEF – Peak Expiratory Flow

PTSD – Post Traumatic Stress Disorder

RVI – Respiratory Viral Infection

SCM - Sternocleidomastoid

TA – Therapeutic Alliance

UCS – Upper Cross Syndrome

W – With

X – Cross

Introduction and Literature Review

Asthma prevalence

Asthma attacks kill 3 people in the UK each day. But many of these deaths could be avoided. Every 10 seconds someone has a life-threatening asthma attack (NHS England, 2023).

The British Lung Foundation, (2021) found asthma affects more than 300 million people worldwide including 11.6% of children aged 6 to 7 years.

According to Ntontsi et al. (2021) asthma is one of the most common respiratory diseases that affects both children and adults worldwide.

Asthma is a very common long-term lung condition. It affects the airways that carry air in and out of the lungs. 8 million people – over 12% of the population – have been diagnosed with asthma. This means more people have had an asthma diagnosis than have been diagnosed with all other lung diseases combined (NICE, 2023).

This not only affects the individual but impacts the larger community. Bruton and Lewith (2005) state that the socioeconomic impact of asthma is that hospitalisation accounts for the majority of healthcare expenses, with medication accounting for the second largest portion (in context £1.4billion in 2023)

Adding to the above costs is the loss in working hours; A study by Bajorak, Hind and Bevan (2016) for The Work Foundation, Asthma and Lung, UK found in the UK 12.7m working days are lost every year due to asthma-related sickness, and, according to a multinational survey Gruffydd-Jones et al.

(2019), the average percentage of work hours missed in a single week due to asthma symptoms was 9.3%.

Aetiology and definition

Asthma is a chronic inflammatory disorder arising from not fully understood heterogenic gene-environment interactions. However, the cause of asthma is unknown. It features variable airway obstruction and bronchial hyperresponsiveness. Clinically, asthmatics exhibit recurrent episodes of wheeze, cough, chest tightness, and shortness of breath (Mims, 2015).

This is also stipulated in the patient leaflet provided by the NHS, Asthma Biologics (2022) asthma is inflamed and "sensitive" airways that become narrow and clogged with sticky mucus in response to certain triggers, often described by patients as 'difficult breathing' and 'air hunger'.

To establish parameters of disease severity Loniță (2008) looked at pulmonary function; Bergmann (2016) looked at Non-Type 2 asthma and Bronchial asthma; and Hudey, Ledford and Cardet (2020) looked at the varying kinds of asthma. This study looks at participants with an asthma diagnosis.

Pulmonary function also relates to posture described as having UCS (upper cross syndrome) (Kirthika et al., 2018). The presence of this syndrome leads to secondary health problems such as myofascial trigger points, cervicogenic headache, impingement syndromes, neck pain, rotator cuff injury, and reduced lung capacity.

Schoettler and Strek (2019) identified two major risk factors that contribute to severe asthma those being genetics and environmental exposures (triggers) that modulate immune responses. The NHS (accessed 2023) identify environmental exposures such as infections; allergies; smoke; pollution; medicines – particularly anti-inflammatory painkillers like ibuprofen and aspirin; emotions, including

stress, or laughter; weather, sudden changes in temperature, cold air, thunderstorms, heat and humidity; mould or damp; and exercise.

Current ways of testing for asthma

FeNO test – nitric oxide is a sign of inflammation in the lungs, to measure the levels the patient is asked to exhale into a machine.

Spirometer– to measure the pattern of airflow, the amount of air held in the lungs and the speed at which a patient can exhale, this is measured by the patient blowing into a machine.

PEF test –involves the patient blowing out as hard and as fast as they can into a handheld device to measure the maximal rate that a patient can exhale during a short maximal expiratory effort after a full inspiration (NHS, accessed 2023).

Chest X-ray - not typically used to diagnose asthma, but to check and identify other causes when the asthma symptoms are not responding to treatment, i.e. pulmonary fibrosis.

Allergy tests – skin and blood tests can be helpful in defining substances the patient is allergic to, to enable a precise approach to manage these triggers (Dept of Health, Govt. Aus., 2024)

Conventional treatment

Inhalers (steroids and bronchial dilators) are the main treatment. Tablets (Montelukast) and other treatments if asthma is severe. NHS (accessed 2023)

Over the past 20 years, the Global Initiative for Asthma (GINA) has regularly published and annually updated a global strategy for asthma management and prevention. Previously funded by multimillion pharmaceutical companies. Since the introduction of medical therapy for asthma, interest in non-medical treatments deteriorated. Bruurs, (2013)

Comorbidities – Asthma and Anxiety

There is a reported correlation that adults with asthma also suffer from anxiety. Studies by Asthma and Lung UK (2024) suggest anxiety is common when people have a long-term condition, including a long-term lung condition. Many things can cause anxiety, and anxiety affects people in different ways, e.g, panic attacks, social phobia, or post-traumatic stress disorder (PTSD), particularly following a traumatic hospital admission.

Anxiety changes the way a person breathes and can make lung symptoms feel worse, leading to flare-ups of lung conditions or asthma attacks. It is linked to emotions, stress, and panic attacks.

See Figure 1.



Figure 1. The cycle of anxiety and breathlessness. Reproduced with permission from Asthma and Lung UK, March 2024.

Studies by Del Giacco et al. (2016), Meuret, Tunnell and Roque (2020), Robinson et al., (2020); Lacwik, et al. (2021); Ye, Baldwin and Hou (2021) show a significant association between various mental disorders and asthma, in particular depression and/or anxiety, with some more robust data regarding anxiety disorders. The studies also highlighted psychological issues had a negative impact on effective disease control and quality of life.

According to Ye, Baldwin and Hou (2021), asthmatics are 1.89 times more at risk of experiencing anxiety symptoms and 2.08 times more likely to develop anxiety disorders than non-asthmatics.

‘Dysfunctional Breathing’ a differential diagnosis

It is important to recognise that dysfunctional breathing (DB) is often associated with, and can exacerbate, symptoms of respiratory diseases such as asthma, chronic obstructive pulmonary disease (COPD) and obliterative bronchiolitis. The introduction of appropriate therapy produces significant benefits in terms of function and quality of life.

Ambiguity and the use of multiple terms to describe the same condition, has hampered understanding of DB and created difficulties in objectively identifying it. Terms such as dysfunctional breathing, hyperventilation syndrome, disproportionate breathlessness, behavioural breathlessness, anxiety related breathlessness, sighing dyspnoea, psychogenic functional breathing disorders and somatoform respiratory disorders have all been used to describe, essentially, the same problem (Barker and Everard, 2015).

Complementary therapy (CAM)

Non-medical treatment of asthma may include education, guidance of patients and various forms of physiotherapy. Most asthmatics have a dysfunctional breathing pattern and poor physical condition.

Physical training programmes aim to improve physical fitness, neuromuscular coordination and self-confidence.

It is possible that a loss of muscle mass, including the respiratory muscles, occurs in asthmatics, related to the effects of treatment with corticosteroids: a suitable target for training (Bruurs, 2013)

Massage Therapy for anxiety and asthma

Del Giacco et al. (2016) shows the effectiveness of massage therapy on chest pain, anxiety, and stress in patients, particularly common in those with chronic diseases such as asthma. The clinical studies support both massage and acupuncture to help decrease pain, anxiety, and dyspnoea and to improve sleep in patients with chronic lung disease.

Although massage is one of the most popular complementary and alternative medical (CAM) treatments for anxiety, its effectiveness has never been rigorously evaluated for a diagnosed anxiety disorder. A study by Sherman, et al. (2010) evaluated the effectiveness of therapeutic massage for persons with generalized anxiety disorder. All groups had improved by the end of treatment.

The effects such as decreased depression, improved quality of life, improved sleep, and decreased pain have been highlighted by research. For example, findings from a study with eight patients with GAD (General Anxiety Disorder) and severe anxiety revealed that the patients were able to rediscover their own capacity during the massage period. This was illuminated by the experience of being relaxed in body and mind, the experience of unconditional attention, decreased anxiety and increased self-confidence (Billhult, 2009)

Five patients who presented with symptoms of tension and anxiety were subsequently referred to a physiotherapist and treated with Connective Tissue Massage. All patients showed a significant response to treatment in one or more of the psychophysiological parameters (McKechnie, et al., 1983).

This study will also look at reducing anxiety symptoms using GAD-7 as the measurement, Jing method massage and breathing guidance as the intervention.

Massage Therapy for asthma

According to Ogbu et al. (2023) the trends are rising in seeking complementary and alternative medicines/therapies (CAM).

As suggested in previous studies the use of alternative therapies when managing patients with asthma (Slader et al., 2006) Seventeen studies showed that between 4-79% of adults with asthma had tried complementary therapies to manage their symptoms.

Correspondingly the study Robinson and McGrail (2004) estimated over 50% of patients that require health care use CAM either with, or separate from, conventional health care.

In the small trial study Hondras, Linde and Jones (2005) compared massage therapy with a relaxation control group, and they found significant differences in many of the lung function measures obtained.

Similarly, results by Abdel, Fattah and Hamdy (2011) evaluating the effect of massage therapy on the pulmonary functions of stable Egyptian children with asthma, concluded a beneficial role for massage therapy in paediatric asthma. As the FEV1 (forced expiratory volume) was significantly higher in the massage group.

And Löwhagen and Bergqvist (2014) found that massage therapy improves adult pulmonary lung function.

A few years later, more positive results were obtained when Field (2016) concluded that massage therapy groups have experienced more positive effects than the control groups receiving standard treatment or doing exercise.

More recently deep tissue massage (DTM) appeared to improve chest expandability and vital capacity with simultaneous decrease of FVC (forced vital capacity) in healthy subjects, study by Bartosz et al. (2023).

JING method

The Jing Method™ blends advanced bodywork techniques from both East and West including trigger point, fascial work, acupuncture and stretching with a truly holistic approach based on the biopsychosocial model of pain and modern neuroscience.

Massage therapy is known to reduce anxiety as stated in the aforementioned studies and how Jing specific small scale studies show the effectiveness of massage and /or online intervention in reducing symptoms of stress, PTSD, anxiety and depression in line with this current study, is supported by; Quayle, (2023); Casaidei, (2023); Jones-Morris, (2021); O'Neil, (2021); Rigby, (2020); Ellis, (2018); Bond (2017). And more specifically asthma: Miller, (2023); Goulding, (2015).

Hypothesis:

The Jing method has been shown to be beneficial in two previous small-scale studies in relation to asthma, however each study recommended more clinical trials to continue to prove the positive impact (Goulding, 2015; Miller, 2023). Massage has been shown to be effective in treating anxiety, a known factor for asthma attacks (Sherman, 2010; Asthma and Lung UK, 2023).

For the most part this study will replicate the method and protocols followed in Miller (2023) and Goulding (2015) using The Jing Method™ ‘Ribs, Thorax and Abdomen’ protocol’ (Fairweather and Mari, 2015) to ‘Evaluate the effect of the Jing method of clinical massage on adults with asthma,’

In addition, this study will seek to assess the levels of anxiety the participants experience using the generalised anxiety disorder (GAD) questionnaire.

Method

Ethical approval was received from Jing Advanced Massage Training to Evaluate the effects of the Jing method™ of Advanced Clinical Massage on adults with asthma (Appendix 1).

This study is to provide 5 hands on and 1 self-care session to adults with asthma.

Recruitment channels for suitable candidates took the form of social media, (Appendix 4) word of mouth, client email list, and a physical blackboard outside the researcher's clinic asking for participants. A total of 5 people signed up, aged between 18-48, 3 men and 2 women, meeting the inclusion criteria.

The inclusion requirements were adults with a formal asthma diagnosis from their GP, taking regular inhalers (as prescribed), and available for the duration of the study. Exclusions were compromising comorbidities, pregnancy, or receiving treatment elsewhere at the time of this study.

This small-scale study focuses on 5 adults over 18 years with asthma. On daily corticosteroid inhalers and bronchial dilators. They were all sedentary desk workers who increased their cardiovascular levels by exercising regularly (three times a week), making this a homogenous group.

All participants received a telephone consultation to begin the process of completing the medical history questionnaire (Appendix 3) and to explain the study to them. Demographic, social and clinical data were collected. Consent to the study was obtained from each participating participant. (Appendix 2)

Instrument

Those that met the inclusion criteria were asked to complete 2 questionnaires (in Appendix 1) for the duration of the 6 week control period and the 6 week intervention period. The ACT (The Asthma Control Test) a five-item survey to assess asthma control was employed and the Generalised Anxiety Disorder (GAD-7).

The parameters considered in the ACT questionnaire are daytime and nocturnal asthma symptoms, the use of rescue medications, and the effect of asthma on daily function. Each item includes five response options corresponding to a 5-point Likert-type rating scale, the scores from the responses to the five items range from 5 (poor control of asthma) to 25 (complete control of asthma).

Similarly, the GAD-7 (Generalised Anxiety Disorder) a seven-item survey to assess anxiety severity levels was employed. Each item is scored on a four-point Likert scale (0-3) with total scores ranging from 0 (minimal anxiety) to 21 (severe anxiety).

The questionnaires were emailed every weekend and completed each week by the participants and returned to the researcher by the end of the subsequent Sunday.

In addition, during weeks 5 and 6 and 11 and 12 the participants were asked to record their PEF both am, and pm (morning and evening). Figure 2 outlines the schedule for the recording of data.

Table 1 Timetable for study.

Week	ACT and GAD-7	PEF	Treatment	Self-care x 3pw and inform researcher
1	Y			
2	Y			
3	Y			
4	Y			
5	Y	Y		
6	Y	Y		
7	Y		Y	
8	Y		Y	
9	Y		Y	
10	Y		ONLINE	Y
11	Y	Y	Y	Y
12	Y	Y	Y	Y
13-15	-			
16	Y			

Study Period

The control period started week commencing 31st July 2023, (for 6 weeks), followed by the intervention period week commencing 11th September 2023 (for the next 6 weeks). The questionnaires were completed for the entire duration of the 12 week period, and an additional one emailed 4 weeks post treatment to gauge the long term effects. Followed by a feedback form (Appendix 6) on overall experience, benefits felt, and future study recommendations.

Intervention

Table 2 Brief outline of intervention using the Jing Method™ Massage Ribs, Thorax and Abdomen
(Appendix 5 for full protocol used).

Prone	Breath observations MFR X hand stretch Massage lamina groove Strip posterior-lateral ribs Serratus posterior superior Quadratus lumborum *If client has mucus Re observe breath	Observe client; bring their awareness to restricted area. Work using rabbit paw hands Work from opposite side, intercostals Release trigger points Release any trigger points *Add tapotement: hacking, cupping, chopping Volume, rhythm, and depth of breath
Sidelying	Clear iliac crest Work lateral line of body Work serratus anterior Anterior QL Subclavius – wait and hold	Work from medial to lateral Mould hands and glide up towards shoulder girdle Lift arm to work upper fibres under armpit. Use fingertips for subscapularis and serratus anterior. Replace clients arm. Mobilise scapula. Wait and hold for release. Client can drop hip away (lengthen leg and take it back to aid release). Or cross fibre friction
Sidelying cont.	Freeing costovertebral joints Lateral breath compressions	Push me/Pull you action: push shoulder away and draw costovertebral spines towards you Mould hands over ribs laterally and apply gentle pressure to encourage greater exhalation and provide resistance on inhalation.
Supine	Sternum and chest MFR x hand stretch Ribs- opposite side of table Subclavius Pectoralis major	Hand over hand on sternum With palms, paddy paw chest, alternating sides Over chest area CDP – circular digital pressure down sternum Laterally work intercostal spaces Work intercostal spaces, medial to lateral Strip (client allow arm to lower off table if poss.) Strip from medial to lateral, broad/heel of hand
	Pectoralis minor w. movement Scalene release Diaphragm Bouncy castle technique Breath compressions	Kneel, reach for pec mn. client backstroke arm Seated, palpate under SCM, locate scalenes, ask client to turn head to opposite side. From side - Gently compress the ribs with one hand and use other to curl fingers under the costal edge to release diaphragm. Static /x fibre Assess viscoelasticity of anterior ribs, upper and lower portions, left and right. Use MFR compression and torquing to release. Re assess portions. Apply gentle pressure to encourage greater exhalation and provide resistance on inhalation.

Abdomen	Place hand on abdomen	Be grounded, feel for any pull towards visceral restrictions.
	MFR work	Use x hand stretch, skin rolling or transverse plane releases on restricted viscera.
	Work abdomen	Palms on abd. Fingers pointing to left side, create a wave motion w. left palm, then fingers, transferring to right fingers, then palm.
	Rectus abdominus	Stripping w supported fingers, releasing any trigger points.
	Finishing	Draw client's attention to the breath.

During the massage sessions, clients were guided through some breath work for aspects of the Jing Method™ Ribs, Thorax and Abdomen protocol, bringing their attention to their breathing apparatus and how their body responded to different pressures around their ribcage, and how released intercostal muscles created more freedom of movement around their ribcage, directly influencing the diaphragm and lungs.

In addition, to lengthen the breath, and to promote a sense of calm, the breathwork encouraged was to create a longer exhale, simply by humming or imagine one was blowing out through a straw.

Physiotherapists and others have routinely used breathing exercises to treat patients with hyperventilation symptoms. The aim is to develop a more efficient pattern of respiration by 'normalising' the breathing pattern, thereby reducing breathlessness (Bruton, 2005).

Analysis

To use bar charts and Pearson Linear scales to measure the sets of data collected from the questionnaires over the 16-week period for asthma control, severity of anxiety and peak exploratory flow.

Results

ACT questionnaire

The ACT scoring is between 0-25, where a high score 25 is the best outcome (this means the higher the number the more under control the participants asthma is).

The results from the ACT questionnaire, show a moderate improvement overall 20.2 – 21.4 in asthma control, ranging between 0.0% to 15.8% improvement, with an average of 6.9% from week 1 to 16.

The results show an average improvement of 6.9% for the participants control of asthma symptoms.

A positive result. Over the course of the control period and intervention period, the participants informed the researcher when experiencing cold symptoms.

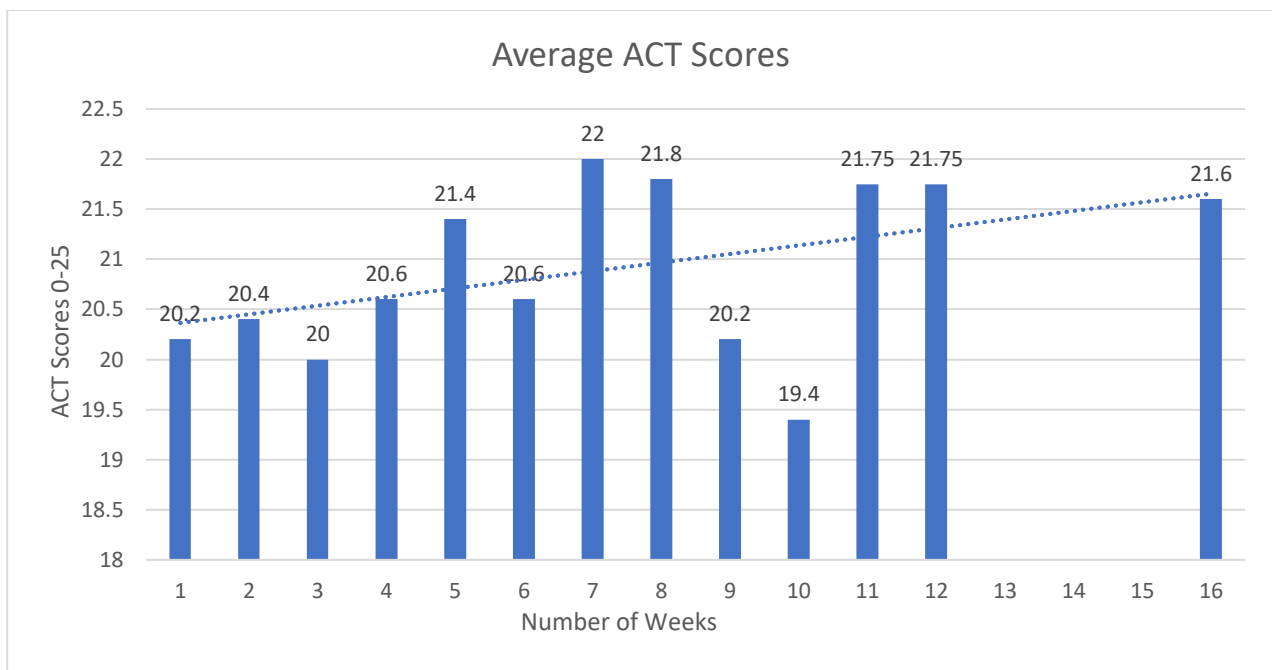


Figure 2. Average ACT Scores shows the scores 0-25, the higher score indicates a good level of control over asthma symptoms.

The trend overall is positive.

GAD-7 Questionnaire

The GAD-7 scores 0-21, in this instance the lower the score, the better the outcome. Score 0-4: Minimal anxiety. Score 5-9: Mild anxiety. Score 10-14: Moderate anxiety. Score greater than 15: Severe anxiety. The highest average score was 7.4, however during the intervention period the score consistently reduced week on week and continued into the long-term when re assessed in week 16.

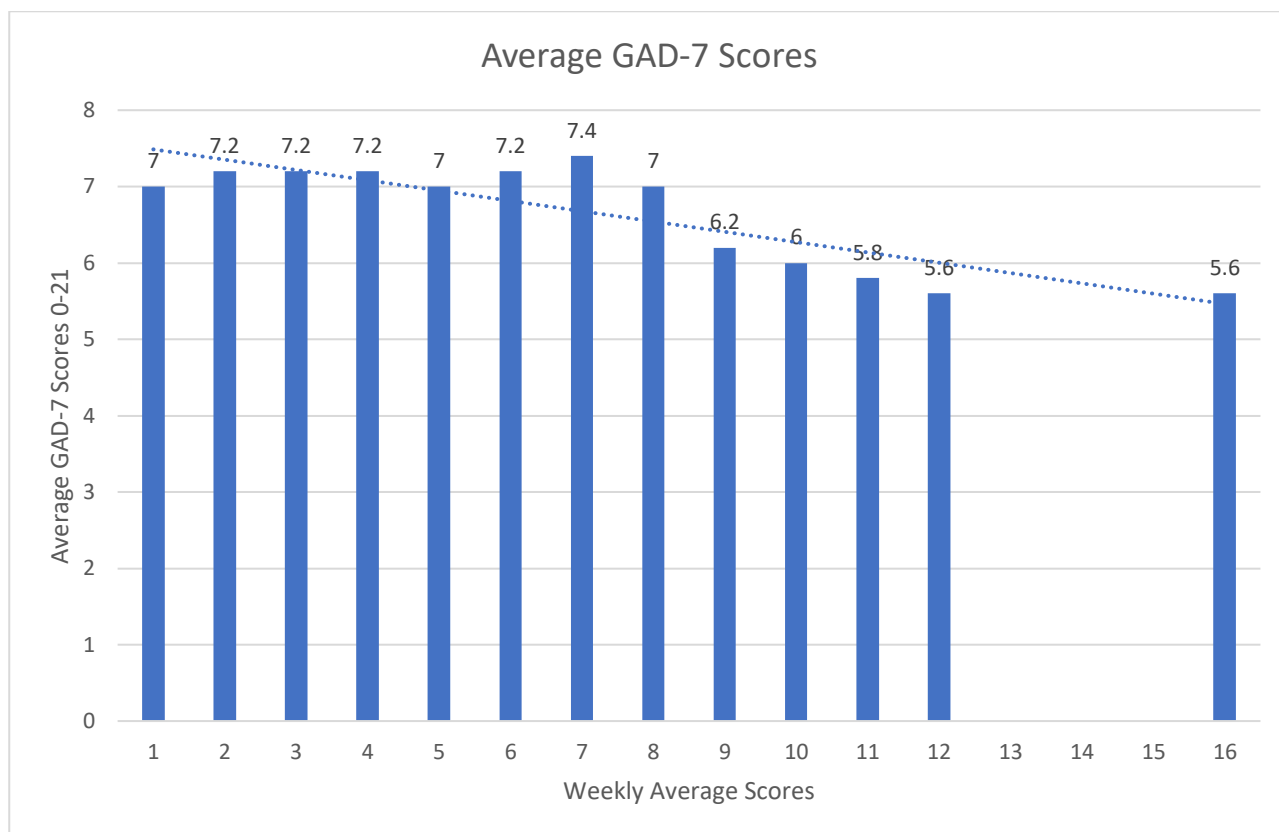


Figure 3. Average GAD-7 Scores. Scores between 5-9 indicate a mild level of anxiety.

Figure 3. shows the results from the GAD-7 questionnaire. The range between this group of participants is from a high of 7.4 down to a low of 5.6; within the 5-9 score which represents mild anxiety. Which relates to 0.0% to 41.7% improvement, with an average of 20.1% from week 1 to week 16.

From week 7, the intervention period, whilst the participants received Jing Massage Therapy, their anxiety symptoms reduced week on week.

The trend is clearly positive.

Figure 4. shows the PEF readings for both am and pm, for week 5 and week 6 and weeks 11 and 12.

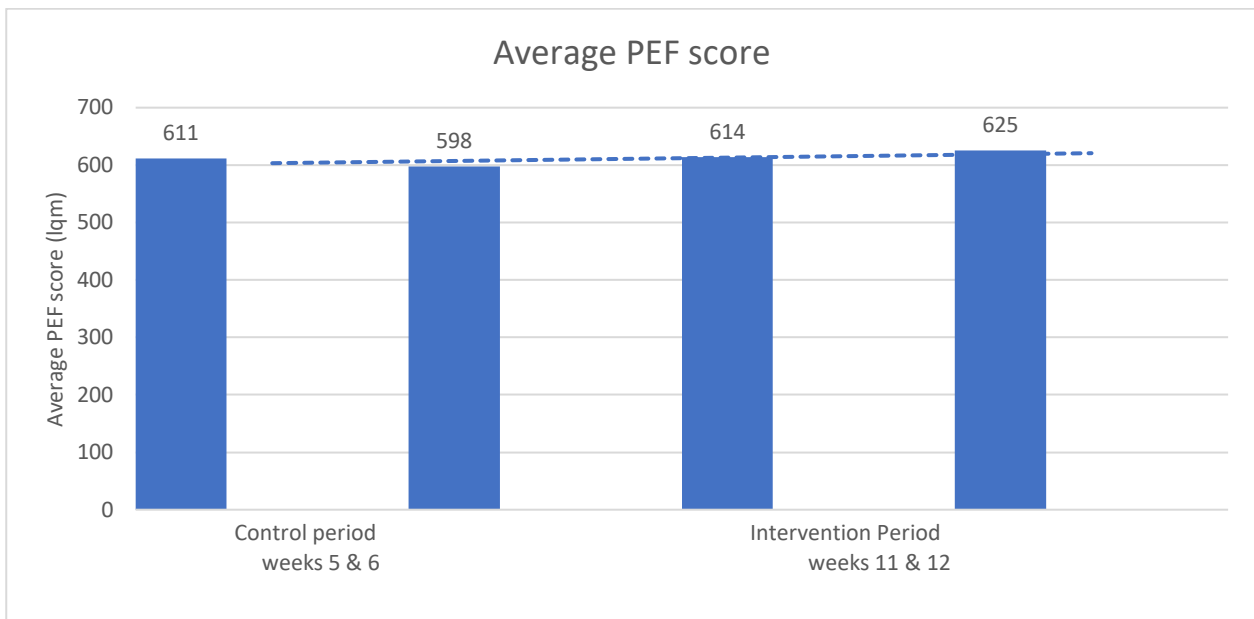


Figure 4. PEF Scores, higher scores indicate better PEF

The results show an improvement in the Peak Expiratory Flow (PEF) scores (litres per minute) for those weeks. Which equates to 2.3% to 4.8% improvement, with an average of 4% increase from week 1 to week 16. A 1% increase in morning PEF readings and 1.5% increase in the evening.

There was a compliance issue as some participants failed to submit PEF readings for all the weeks specified, despite polite requests to complete, with the emphasis on the study.

Despite the compliance issue, and participants having colds over various weeks the scores recorded show a positive improvement.

To summarise: In this review, massage therapy has been shown to have beneficial effects on adults with asthma. From the five participants that took part in the research over 16 weeks, the results were positive. A 6.9% increase in asthma control, a 20% decrease in anxiety symptoms and a 4% increase in PEF.

These figures add to the growing body of evidence which support massage to be considered as part of an asthma treatment program, and for reducing symptoms of anxiety.

Discussion

The aim of the present study was to investigate the effects of the Jing Method™ of Clinical Massage on adults with asthma. This study shows that massage therapy can have beneficial effects on asthmatics. This study is the third of its kind, whether the Jing method Ribs, Thorax and Abdomen, accompanied by online self-care instruction can play a role in the treatment of patients with asthma.

The main findings are that the Jing method of mixed methodology, massage and online self-care treatments improve disease specific quality of life, improve pulmonary function, reduce symptoms and medication use.

These measurements were taken using the ACT to measure levels of asthma (Fig. 2) and use of prescribed inhalers and take PEF readings (Fig. 4) during the control period and the intervention period to measure pulmonary function.

The results showed positive benefits to clients suffering with asthma.

In addition, albeit anecdotal, improvements were made in recovery after exercise, and postural awareness.

In this study, the Jing method was used to help treat the Ribs, Thorax and Abdomen. Several studies have previously identified that massage can benefit people with asthma. Bartosz, (2023); Miller, (2022); Goulding, (2015); Fattah, (2011); and Hondras, (2005)

Goulding (2015) and Miller (2023) found that the Jing method had a positive result on PEF and ACT. The current study utilised the same protocol ideas as that used by Goulding and Miller.

Goulding (2015) was hands-on only for the intervention period and Miller (2023) was blended online and hands-on, as was this study. All participants have benefitted from the treatments.

Cumulative evidence is building with each of these small-scale studies, 19 participants in total to date, showing a level of reproducibility of the studies by therapists trained in the same modality.

Asthma and massage

Positive results were obtained in the Hondras, Linde and Jones (2005) study, in which massage therapy was compared with a relaxation control group and significant differences in lung function measures were obtained.

Similar findings supported the positive significance of massage treatment in the study by Abdel Fattah and Hamdy (2011), which assessed the impact of massage therapy on the pulmonary function of children with asthma. It was concluded that massage was of significant benefit.

Subsequent research, Field (2016) found that, on average the groups with autoimmune conditions including asthma, receiving massage therapy had more positive outcomes than the control or comparison groups.

More recently the study Bartosz et al. (2023) found Deep tissue massage (DTM) to improve chest expendability and vital capacity.

The study supports Goulding (2015) and Löwhagen and Bergqvist (2014) findings that massage therapy improves adult pulmonary lung function.

Anxiety and massage

In addition, this study looked at the correlation between patients with asthma and the comorbidity of anxiety, as has been previously documented in Del Giacco et al. (2016), Meuret, Tunnell and Roque (2020), Robinson et al., (2020); Lacwik, et al. (2021); Ye, Baldwin and Hou (2021).

Previous studies conclude that massage is beneficial as a treatment in patients with anxiety (Sherman et al., 2010; Billhult et al., 2009); and McKechnie et al., 1983) Patients using GAD as the measurement for their anxiety.

These findings concurred with Leeman, G. (2020) case study *The Effects of Using Jing Myofascial Release on Individuals Suffering with Self Diagnosed Anxiety and Stress*, and concluded, 'Treatments could alleviate anxiety and stress. Giving a positive result.'

This is the first study using the Jing method as a treatment to reduce anxiety symptoms in asthmatics, using the GAD-7.

As the primary focus for this study was to use mixed methodology combining Jing massage with after care exercises and advice, the research measured how the participants felt using their responses from the GAD-7 questionnaire, and incorporated breathing techniques which effectively lengthened the exhalation (Santino, et al. 2020)

The GAD-7 responses fall into the following categories: mild anxiety levels: Score 0-4: Minimal Anxiety. Score 5-9: Mild Anxiety. Score 10-14: Moderate Anxiety. Score greater than 15: Severe Anxiety.

During the intervention period the results indicated a 20% decrease in anxiety levels, an overall average improvement (Fig. 2).

The conclusion that asthmatics with anxiety would benefit from stress relieving interventions is supported by the meta-analysis from Ye, Baldwin and Hou (2021).

JING Method™

The Jing Method™ ‘Ribs, Thorax and Abdomen’ protocol’ (Fairweather and Mari, 2015) was utilised in this study, and two preceding studies (Goulding (2015) and Miller, 2023) all achieving positive results in the reduction of asthmatic symptoms.

This study showed a 6.9% average increase in asthma control (Fig. 2) and a 4% increase in PEF readings (Fig. 4); the PEF measurements were obtained in the morning and evening, the five participants showed an average increase of 4% overall, with a 1% improvement in the morning and a 1.5% increase in the evening. And a 20% decrease in anxiety symptoms (Fig. 3).

Goulding’s (2015) results from the seven participants showed an increase in PEF with average improvement of 11%; 10% increase in the morning PEF readings and 12% increase in the evening, and Ventolin usage saw a decrease of 71%.

Miller’s (2022) results from the seven participants, all female, showed an average increase in asthma control and a 6% improvement in PEF.

After care/ Self-care – breathing and posture

Breathing exercises have been used worldwide as a non-pharmacological therapy aiming to treat people with asthma to control the symptoms to manipulate the breathing pattern.

(Santino et al., 2020) Concluded that breathing exercises may have positive effects on quality of life, hyperventilation symptoms, and lung function in adults with mild to moderate asthma.

Breathing practices, in psychiatric research and clinical practice, diagnostically improve symptoms of anxiety, depression, trauma, addiction, obsessions, compulsions, and inattention (Banushi, et al., 2023).

GINA (2022) does not cite any alternative therapies in its guidance on managing asthma symptoms but does advise on smoking cessation, weight reduction, the benefits of a wholesome diet, exercise and breathing to relieve asthma symptoms and enhance quality of life.

Therefore, this study incorporated an aspect of breathing as part of the intervention period, initially during the massage sessions. Then online at week 10 followed by simple exercises and stretches, as aftercare sent via video link to be practiced and continued if the participants felt the benefits. Self-care is an important part of the Jing method.

Once engaged in the breathing techniques as directed from week 7, postural awareness by the participants was gained, and compounded through the integration of the online instruction program introduced at week 10. The participants' attention to and awareness of their posture during the intervention period was undoubtedly a missed opportunity to take before and after images. Albeit subjective, the overall change across all 5 participants was positive.

The participants responses in the feedback forms in week 16 indicated an increased level of self-awareness gained from the massage and self-care techniques. They reported to be implementing some of the different strategies to adjust and improve their posture addressing UCS working at a desk, by lifting through their sternum, opening chest to broaden shoulders, and area of ribcage to increase pulmonary function; and address head, neck, and shoulders in sleeping postures.

In addition, albeit anecdotal, improvements were made in recovery after exercise, and postural awareness.

Contribution to research

In this study to Evaluate the effects of the Jing MethodTM of Clinical Massage on adults with asthma the results add to the growing body of evidence in reducing asthma symptoms. The treatments demonstrated a causal association between treatment and outcome as the study progressed through the intervention period.

By improving asthmatic patients' pulmonary function, reducing the frequency of asthma attacks, and enhancing their capacity to de-stress and feel less anxious, this study adds to the growing body of research proving the health benefits of massage and Jing Advanced Clinical massage techniques.

This study was the first to show a link between the Jing method of advanced clinical massage, asthma and anxiety.

Critical valuation and limitations

There are a few limitations within the planned research, as variables are inevitable. The total number of participants was small, 5 in total for the duration of this study. However, the fact that this is the third small scale study adds to the evidence of the effectiveness of the Jing method in treating asthma.

The frequency and duration the participants followed the self-care video was not recorded, however feedback received was positive, and the participants found the tools and strategies helpful with long-term benefits.

There is no control over environmental exposures: RVi's (Respiratory Viral infections): affecting appointment keeping, and pulmonary function.

Accountability and compliance: some participants failed to submit all the PEF readings required for the study.

The eponyms and differential diagnoses for what essentially covers similar if not the same symptoms, causes confusion and dilutes the evidence when researching ways to create a beneficial program to treat 'respiratory lead' symptoms. Tying together all these different branches to build one body of evidence-based research, would carry more weight when demonstrating the positive benefits achieved through massage intervention for asthmatics and their comorbidities. After all the respiratory system is integral to the body's other functions.

Reflection and recommendations

To take into consideration the relationship posture has over pulmonary function, as study by Kirthika, (2018), the impact UCS posture has on lung function in a group of healthy recreational males. It concluded that recreational male players with UCS have lower pulmonary performance when compared with their age-matched normal individuals.

Recording postural changes in a future research project through measurements of chest expansion and the use of permitted images would add to the data collected on the impact UCS has on pulmonary function, and the importance after-care and exercise has on the overall improvement of asthma control and anxiety reduction.

Exercise induced asthma and recovery

Miller (2023) drew a comparison with Jaakkola et al., (2019) RCT in which exercise interventions were used and asthma control was measured using the ACT and PEF, which found a statistically significant reduction in quick-relief medication usage and shortness of breath. But PEF outcomes did not improve.

Miller (2023) used the mixed methodology of hands-on and online sessions of Jing massage and rehab exercises and saw notable improvements in PEF outcomes.

As a result, the strategy of employing a combined methodology of Jing massage protocols and rehab exercises, as described in the studies by Miller (2023) and this present research, has promise for the future control for individuals of asthma.

The feedback from the participants themselves throughout the intervention weeks was positive with regards to their symptoms and recovery time when their asthma was triggered.

Including after sport.

For the instances of this study, many of the participants now incorporate the aftercare techniques delivered over zoom, and video, into their everyday lives.

Conclusion

This study was to Evaluate the effects of the Jing Method™ of Clinical Massage on adults with asthma.

Massage therapy has been shown to have beneficial effects on adults with asthma. From the five participants that took part in this research over 16 weeks, the results were positive. A 6.9% increase in asthma control, a 4% increase in PEF, and a 20% decrease in anxiety symptoms.

These figures add and support the increasing evidence for massage to be considered as part of an asthma treatment program, and anxiety reduction program.

The adoption of massage as an additional form of therapy in the treatment of asthma and anxiety, needs to be considered as the positive benefits are clear from these results and adds to the previous studies where massage and the Jing approach of mixed methodology was used as part of the intervention period.

The Jing Method™ is beneficial for adult asthmatics, and adults with anxiety, combining clinical massage therapy, myofascial release, hot stones, acupuncture, breathing techniques, mobility instruction, and self-massage to increase asthma control, improve PEF and reduce levels of anxiety.

It is challenging to completely determine clinical efficacy solely on the findings of this small trial. Nonetheless, the positive trends observed in several outcome measures after the massage procedure and selfcare exercises imply that more studies with a bigger sample size would give the benefits of the Jing massage programme more validity. Therefore, more research is warranted.

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(1) Ethics form



	CHECKLIST OF INSTRUCTIONS FOR STUDENTS	✓
1	Complete Section 1 to Section 13	
2	Electronically sign and date	
3	Participation information form	
4	Participation consent form	

Jing BTEC Research Ethics Form

BTEC Level 6 – Professional diploma in advanced clinical sports massage

Section 1: to be completed by student

Student's name:	Lucia Lloyd-Clokie
BTEC Year-group:	2022-2024
Date of application:	28 th April 2023
Student email address:	lucia.lloyd1@gmail.com
Title of research project:	Evaluating the effects of the Jing™ method of Clinical Massage on adults with asthma.

Section 2:

Does your project involve any primary research using human subjects?

Please delete as appropriate.

	YES	NO
Does your project involve any primary research using human subjects?	X	
If yes, does it involve children under 16?		X
If yes, does it involve children under 18?		X
Other vulnerable populations (i.e. mental illness, aged subjects)?		X
Does your project involve NHS patients, NHS staff or Local Authority Service Providers? <i>If yes, you must obtain 'external ethics approval' for your proposal before the form can be signed-off by 'Jing' and before you can start your fieldwork.</i>		X
Are you planning to use deception?		X
Are you collecting sensitive personal data such as sexuality, mental health data, etc?		X

Does your project make use of a validated questionnaire?	X Asthma Control Test GAD-7	
Does your project make use of a new/adapted questionnaire or semi-structured interview checklist?		X

Section 3:

Where is your research being undertaken? Hands on treatments during intervention period will take place at Unwind-Clinic, Peretun, Ashperton, Ledbury, in the researcher's clinic.		
If your research is being undertaken outside of your own premises, do you have written confirmation from the establishment involved? If yes, please provide evidence.	YES	NO X

Section 4:

How will you recruit subjects for this research study? Create a poster to promote reason for research on website, current clients mailing list and referrals, Pilates class, nextdoor app, social media - Instagram, Facebook; Local Parish Magazine, Local chemist, and colleague's breathwork clinic.
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Section 5:

How will you manage participant confidentiality? Ensure that the information refers to GDPR and is compliant with this legislation. All data will be held in accordance with the General Data Protection Regulation (GDPR) (UK) 2018. On initial intake form, participants will be informed that their information will only be seen by the researcher, and not available to third parties. Client names will be replaced by numbers, so they remain anonymous. All data collected will be stored on the researcher's personal computer which is password protected. Any data held on a personal computer and/or phone will be password secure. Any paperwork collected about the data subject will be locked in appropriate storage. During ZOOM calls participants will be asked to use their initials only or a pseudonym for their own privacy. Participants will be requested not to record the zoom interaction. Data collected or communication via third party companies, such as Mailchimp, Google forms and Dropbox, are compliant with the current data protection laws.
--

Section 6:

- Outline your project procedure
- Recruit participants for purpose of research: **Evaluating the effects of the Jing™ method of Clinical Massage on adults with asthma.**
- Hold initial one to one consultation online; go over any questions they may have and ensure interested parties meet inclusion criteria.
- Interested parties will be required to complete a client consultation form, history of health and an inclusion questionnaire, issued electronically.
- Go over the requirements outlined in the participants letter for the forthcoming study.
- Anyone not meeting the criteria, will be thanked for their interest and offered an alternative arrangement, separate from the research.
- The following 6 weeks, the control period; the participants will receive the ACT questionnaire electronically on a Sunday to be completed during weeks 1-6 of the control period.
- In addition to the ACT questionnaire the participants will be asked to complete the GAD-7 questionnaire (general anxiety disorder).
- The results will provide the baseline level of asthma symptoms within the group.
- The participants will be required to complete the questionnaires weekly, and submit electronically by Sunday 5pm prior to the next week.
- During weeks 7-12: the intervention period; the participants will be required to complete the questionnaires 5 days after each treatment and prior to the next treatment.
- During weeks 5 and 6 of the control period the participants will be required to keep a twice daily PEF Diary issued electronically, and weeks 11 and 12 of the intervention period. Participants will be supplied with identical PEF devices.
- Weeks 7, 8, 9, 11, and 12 of the intervention period the participants will receive 50-minute hands-on treatment and will include the protocol of Jing Method of Advanced Clinical Massage 'Ribs, Thorax and Abdomen protocol'. All participants will receive the same treatment plan.
- Week 10 of the intervention period all participants will required to attend an online 20 minute self-care program including breathwork and relaxation techniques, self-massage, stretching and mobilisation exercises.
- Weeks 10 – 12 Participants will be required to follow the self-care video 3 times over 7 days (3/7) and keep a record of those 3 x (i.e. **Mon, Wed, Fri in the morning).
- **The participants will be requested to keep a record of when they practiced the self-care strategies.
- A reminder email will be sent to participants to do the exercises and to record the day and time.
- After final treatment a final ACT questionnaire, and GAD-7 will be sent electronically at week 16 to assess any longer-term effects of the treatment.
- After this is returned participants will be contacted to provide feedback on the study to express what they experienced during the study, and if they have any recommendations for further research and future studies on the subject. Including a 1-2-1 online discussion with each individual to re-assess progress, discuss any set backs, and suggest a workable plan going forward.

2. Briefly describe, **what your participants** have to do

E.g. will they be interviewed? Where, for how long? Will they complete a Questionnaire? Will they receive a treatment intervention? Will they be involved in a group

discussion?

- Participants will attend an online one-to-one consultation. This will include completing the consent form, providing basic contact details, a detailed client consultation form, gathering health history, lifestyle information and asthma and anxiety related questions. Range of motion testing.
- Participants are required to inform the researcher of any medication or therapies they are receiving which help manage their symptoms.
- For weeks 1-6 Participants are required to complete the ACT questionnaire and GAD-7 electronically once a week and submit it to the researcher prior to the start of the following week. The researcher will send the questions out Sunday 5pm; Participants have 7 days in which to submit their responses; and no later than subsequent Sunday 5pm.
- The participants will be required to complete the questionnaires weekly and submit electronically by Sunday 5pm prior to the next week.
- During weeks 7-12: the intervention period; the participants will be required to complete the questionnaires 5-7 days after each treatment and prior to the subsequent treatment.
- During weeks 5 and 6 of the control period and weeks 11 and 12 of the intervention period the participants will be required to record PEF Diary twice daily. This will be issued electronically. Participants will be supplied with identical PEF devices.
- Weeks 7, 8, 9, 11, and 12 of the intervention period the participants will receive 50-minute hands-on treatment and will include the protocol of Jing Method of Advanced Clinical Massage 'Ribs, Thorax and Abdomen protocol'. All participants will receive the same treatment plan.
- Week 10 of the intervention period participants will be required to attend an online 20 minute self-care program including breathwork and relaxation techniques, self-massage, stretching and mobilisation exercises.
- Weeks 10 – 12 Participants will be required to follow the self-care video 3 x over 7 days (3/7)
- Participants will be required to keep a record of the times they performed the self-care strategy sessions (i.e. **Mon, Wed, Fri in the morning).
- Participants will receive a reminder email to do the exercises and record the days and time.
- 7 days after the final treatment participants will be required to complete a feedback form to express what they experienced during the study, and if they have any recommendations for further research and future studies on the subject.
- After the final treatment participants will be required to complete and submit the final questionnaires in week 16 to assess any longer-term effects of the study. This will be sent electronically.
- Once answers have been returned, participants will be contacted to provide feedback on the study.
- Participants will be offered a 1-2-1 online discussion individually to re-assess progress, range of movement, discuss any set backs, and suggest a workable plan going forward.

Section 7:

What sort of materials or stimuli will your participants be exposed to?

	YES	NO
Questionnaires	X	
Pictures (will you take a photo of participants)		X
Sounds	X Non-vocal calm massage music will be played during intervention stage. Same collation of music will be used on each person per week for each massage session.	
Words	X Interaction before and after hands on. However, silence during the session will be encouraged to promote a sense of relaxation.	
Other	X Hands on Clinical Massage, using Ribs, thorax and abdomen protocol Guided Breathing, stretches and exercises delivered on ZOOM and provided via a link for participants to repeat sessions 3 x week during last phase of study (last 3 weeks).	

ACT questionnaire

Question 1

During the last 4 weeks, how much of the time has your asthma kept you from getting as much done at work, school or home?

All the time ____	Most of the time ____	Some of the time ____	A little of the time ____	None of the time ____
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Question 2

During the last 4 weeks, how often have you had shortness of breath?

More than once a day ____	Once a day ____	3 to 6 times a week ____	Once or twice a week ____	Not at all ____
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Question 3

During the last 4 weeks, how often have your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) woken you up at night or earlier than usual in the morning?

4 or more nights a week ____	2 to 3 nights a week ____	Once a week ____	Once or twice ____	Not at all ____
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Question 4

During the last 4 weeks, how often have you used your rescue inhaler or nebuliser medication (such as Salbutamol)?

3 or more times per day ____	Once or twice per day ____	2 or 3 times per week ____	Once a week or less ____	Not at all ____
------------------------------	----------------------------	----------------------------	--------------------------	-----------------

Question 5

How would you rate your asthma control during the last 4 weeks?

Not controlled at all ____	Poorly Controlled ____	Somewhat controlled ____	Well Controlled ____	Completely Controlled ____
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Questions on General Anxiety Disorder Questionnaire
GAD-7

Over the last 2 weeks, how often have you been bothered by any of the following problems? (please place an x against one of the four answers)

1. Feeling nervous, anxious on edge?		Not at all
		Several days
		More than half the days
		Nearly every day
2. Not being able to stop or control worrying?		Not at all
		Several days
		More than half the days
		Nearly every day
3. Worrying too much about different things?		Not at all
		Several days
		More than half the days
		Nearly every day
4. Trouble relaxing?		Not at all
		Several days
		More than half the days
		Nearly every day
5. Being so restless that it is hard to sit still?		Not at all
		Several days
		More than half the days
		Nearly every day
6. Becoming easily annoyed or irritable?		Not at all
		Several days
		More than half the days
		Nearly every day
7. Feeling afraid as if something awful might happen?		Not at all
		Several days
		More than half the days
		Nearly every day
	Total	/21

For 'Other' please elaborate:

Hands on will follow protocol for Ribs, Thorax and abdomen from Fairweather and Mari (2015).

Example of teaching style for breathing, stretches and exercises

[\(237\) Unwind Pilates warm up 🧘 - YouTube](#)

Actual video used: https://www.youtube.com/watch?v=9Y3hvpDt7_o&t=212s

Section 8:

What sort of people will the subjects be? E.g. people with non-specific back pain, women above 55 years or people diagnosed with osteoarthritis

Adults over the age of 18 with an asthma diagnosis

- who regularly administer asthma medication

And have any of the following symptoms:

- regular episodes of shortness of breath /air hunger
- feeling of a restriction in breathing / tightness in chest
- sense their breathing is not optimal / difficult breathing.

Excluded will be:

- People who have serious underlying health conditions
- Anyone who is pregnant
- Anyone seriously obese according to the BMI

Section 9:

If your research study involves minors, how will you obtain participation permission and who is the responsible adult?

n/a

Section 10:

Special Issues. Give brief details of other special ethical issues and the controls you will put in place to minimise ethical risk.

- Qualified therapist
- Insured Therapist
- GDPR 2018 compliant
- Participants details stored on a password secure computer, to protect privacy and confidentiality.
- Online precautions: Participants will be advised to respect confidentiality and not be permitted to record any zoom sessions on current computer or any other device.

- Participants will be asked to use their initials only or a pseudonym to maintain confidentiality on the group ZOOM session.
- Participants names will be replaced with numbers for the purpose of collating data.
- During hands on treatments, I will follow the guidelines of green coding to protect participants emotional well-being and check-in regularly if their breathing changes, body experiences involuntary movements, or facial expression changes.
- During consultation and throughout treatments the researcher will observe the participants' emotional well-being and any of the afore mentioned. And direct them to additional resources if necessary.
- Ask participants to flag up if they feel pain at any time, and place a number on it between 1-10, so we can work within a 5/10 (maximum) or less to release restriction and tension.
- Recommend participants move within a pain free range when following breathwork, stretches and exercise prescriptive session, and stop if movement feels painful.
- Participants to bring their inhaler (relief medication) with them to each massage session.
- If participants experience an improvement in their symptoms and feel inclined to reduce or stop using prescribed medication; they will be advised to seek appropriate medical advice before reducing or eliminating prescribed medication.
- If post treatment the participants asthma symptoms are triggered or exacerbated, they will use their inhaler/ or asthma reliever brought to the session, as well as seek medical advice. And inform the researcher of the advice received (if appropriate and relevant to the study).

Section 11

What procedures will you follow to guarantee the confidentiality of your participants' data?

TIP: Personal data (name, addresses etc.) should not be saved whereby they can be associated with the participants' other data.

- All data will be held in accordance with the General Data Protection Regulation (GDPR) (UK) 2018.
- On initial intake form, participants will be informed that their information will only be seen by the researcher, and not available to third parties.
- Client names will be replaced by numbers, so they remain anonymous.
- All data relating to each participant, will be stored separately from their completed online indemnity & health questionnaire, and only identifiable by the participants allocated number.
- All will be secured stored and password protected on a personal computer and/or phone, and sensitive information will be destroyed at the end of the study once all data has been collated and submitted.
- All paperwork collected about the data subject will be locked in appropriate storage.
- During ZOOM calls participants will be asked to use their initials only or a

pseudonym for their own privacy.

- Participants will be requested not to record the zoom interaction.
- Data collected or communication via third party companies, such as Mailchimp, Google forms and Dropbox, are compliant with the current data protection laws.

Section 12

Does any of the following apply to your research study?	YES	NO
It requires participants to give information of a personal nature	X	
It involves minors or other vulnerable individuals;		X
It involves paying participants or an alternative incentive to participate		X
It could put you or someone else at risk of injury.		X

Section 13:

	YES	NO
I understand that I can only start my project, once this ethical application has been approved. This applies to ALL projects, whether using human participants or not.	X	

Student's handwritten signature: L S Lloyd-Clokie

(To be completed, once ethical approval has been provided)

Print Name: Lucia Lloyd-Clokie

Date: 28/04/23

IMPORTANT

Consent

Informed consent must be obtained for **all** participants before they take part in your project. The Consent Form (example below) should clearly state the parameters and content of the research. It should explain what is expected of the participants and what they will be doing. It should draw specific attention to any elements that could conceivably cause subsequent objections, and the measures you are taking to ensure the confidentiality of their data. It should also state that the participants are free to withdraw from the study at any time. Studies carried out in schools require the permission of the head-teacher, and of any responsible adults as per the head teachers' recommendation. Minors aged over 14 years should also sign an individual consent form themselves. If you are planning to carry out a project whereby you will be in contact with minors, you must establish from the head-teacher or other responsible adult whether the work proposed will require you to have the relevant DBS disclosure. Please seek advice from your Local Authority.

You must complete a consent form for every participant involved in your study.



PROJECT TITLE: Evaluating the effects of the JING™ method of Clinical Massage on adults with asthma.

STUDENT NAME: Lucia Lloyd-Clokie

STUDY LOCATION: Peretun, Ashperton Road, Ashperton, Ledbury, Herefordshire HR8 2RY

Tel: 07506 906614

email: hello@unwind-clinic.co.uk (for JING: lucia.lloyd1@gmail.com)

INFORMATION FOR PARTICIPANTS

Important

Please be advised that any of you can withdraw your participation from this study at any time. There is no need to submit a reason and there will be no consequences for you because of withdrawing.

What will be expected of you, the participant?

What does the initial consultation and research study involve?

The research will take place over 13 weeks, ideally the start date on 31st July 2023.

All forms to be completed by 25th July; handheld PEF devices, and exercise equipment required to carry out this study will be provided by the researcher to the interested parties by the 31st July 2023.

As an interested participant in the research study, a client consultation form will be completed with the researcher covering your medical and health history. The intake form used by Unwind-Clinic.

If you meet the inclusion criteria, you will be invited to a 20-minute one-to-one online consultation to clarify any questions you may have about the study.

You will be informed by the researcher if you do not meet the inclusion criteria.

The Research is divided into two parts, The Control Period (weeks 1-6) and

The Intervention Period (weeks 7-13).

Throughout the 13 weeks you will be **required to complete the ACT questionnaire** (Asthma Control Test), and the GAD-7 questionnaire (General anxiety Disorder), these are paramount for the researcher to collate this aspect of the data for the study.

The Control Period of the study is: Weeks 1-6

You will be required to complete the ACT (Asthma Control Test) questionnaire, the GAD-7 questionnaire, and anxiety facial score **WEEKLY**, it will be provided to you electronically (emailed Google form). There will be no treatment at this stage as it is to form a baseline of your asthma and anxiety levels over time.

The Intervention of the study: Weeks 7-13

During Weeks 7-13 of the intervention period the questionnaires will need completing 1 x week as well as receiving hands on, and self-care video.

Weeks 7, 8, 9, 11, and 12 of the intervention period you will be **required to attend a 50-minute hands-on** Jing Method Advanced Clinical Massage at the researchers clinic, Peretun, Ashperton Road, Ashperton, Ledbury HR8 2RY.

All participants will receive the same treatment plan.

In addition, during *weeks 5 and 6* of the control period and *11 and 12* of the intervention period you will be required to complete a *PEF test* (peak expiratory flow) using an adult PEF handheld device **TWICE DAILY** at the same time each day, i.e. during the morning and during the afternoon/evening. The PEF handheld device will be provided for you by the researcher.

The results of the PEF readings will be recorded by you in a word document and submitted to the researcher at the end of week 5, 6, 11 and 12. This is paramount for the researcher to collate this aspect of the data for the study.

Sunday of week 9 at 5pm, or Monday of week 10 at 8:15am of the intervention period, **you will be required to attend** a 20 minute **online group teaching session** comprising of breathing and relaxation techniques, self-massage, stretching and mobilisation exercises.

A recording of the researcher demonstrating these techniques will be emailed electronically to you. There will be a link to click on to easily repeat the session for the subsequent sessions and remaining weeks of the study

Following on from the lesson, you will be required to repeat these techniques **3 x week**, i.e. Monday, Wednesday, Friday for the remainder of the study.

Adherence and compliance will be recorded in a word document and returned completed to the researcher by Sunday 5pm at the end of **week 10, 11 and 12**. Also as part of the data collating part of the study.

Four weeks after the final treatment you will be sent a final set of ACT, and GAD-7 questionnaires to be completed and submitted to the researcher, to assess the lasting effects of the study.

Once this has been received, you will then be contacted and asked to give feedback on a form that will be provided at the end of week 16 for all participants to express what you experienced during the study, and if you have any recommendations for future studies.

Your participation is gratefully received. Thank you for your time in taking part.

Are there any risks involved?

To the researcher's knowledge there are no known publications stating massage techniques cause exacerbations of symptoms in asthma patients. Small possibility of bruising if participant goes too deep during self-care.

What are the potential benefits to you; the participants?

This study will see if massage can improve asthma symptoms as has been found in some other studies.

The following is taken from the recent study by Caroline Miller 2022:

'This mixed methodology study of clinical massage therapy and pre-recorded self-care, demonstrates that The Jing Method™ is effective in increasing asthma control and PEF in adults.'

The following is taken from a recent study by Mark Freeman, 2021:

"With time—and the amount of time is different for different people—massage therapy can help open the breathing mechanism muscles and ease the breathlessness someone with asthma feels when they're gasping for oxygen," he says.

A recent study shows Breathe Easier: Asthma and Massage

Massage therapy shows promise in helping people manage asthma symptoms

Article written by Donna Shryer, August 1, 2021

How the results of the study will be used

Your data will be mathematically analysed together with all the other participants' data, and the findings from this analysis will be communicated to the project supervisor and possibly other practitioners. Communication of the findings may be in the form of all / any of the following: a dissertation, reports in scientific journals, articles in newsletters, and presentation at a conference.

Confidentiality

All data and personal information will be stored securely in accordance with the terms of the General Data Protection Regulation (GDPR), (UK) 2018, and will be accessible only by **LUCIA LLOYD-CLOKIE**. After completion of the study, all data will be made anonymous (i.e. all personal information associated with your data will be removed). Your data will be anonymous in any written reports, articles, and presentations of the results of the study.

What to do now you have decided to participate

If you would like to participate, please return a completed consent form to **LUCIA LLOYD-CLOKIE**

If you have any further questions, please contact **me** on the telephone number or email address above.

Thank You.

(2)



PARTICIPANT CONSENT FORM

Title of study: Evaluating the effects of the Jing method of Clinical Massage on reducing respiratory issues and symptoms in adults with an asthma diagnosis.

Name of student: Lucia Lloyd-Clokie

- I have read the information sheet about this study
- I have had an opportunity to ask questions and discuss this study
- I have received satisfactory answers to all my questions
- I have received sufficient information about this study
- I understand that I am / the participant is free to withdraw from this study: At any time (until such date as this will no longer be possible, which I have been told)
- Without giving a reason for withdrawing
- That I am free to refuse to answer any question without saying why
- That the services I am receiving will not be affected whether I participate or not
- I understand that my research data may be used for a further project in anonymous form, but I am able to opt out of this if I wish, by ticking here.
- I agree to take part in this study
- I agree to maintain participant confidentiality by not recording ANY of the ZOOM sessions I take part in on current or other device.

Signed (participant)

Date

Name in block letters

Signed (parent / guardian / other) (if under 18) n/a

Date

Name in block letters:

BTEC students contact details (including telephone number and e-mail address):
Lucia Lloyd-Clokie - mobile: 07506 906614; hello@unwind-clinic.co.uk

Section 3: **Jing 's assessment (to be completed by Jing)**

EITHER:

This project is not designed to include fieldwork with human participants. Insofar as secondary data are to be used, I am confident that appropriate procedures are in place for data protection and non-disclosure of any personal or confidential data.

Signature:**date:**

OR:

This project is designed to include fieldwork with human participants.
(please circle yes or no)

YES / NO All necessary statutory, legislative or other formal external approvals have been obtained (e.g., permissions, police checks, external research ethics and governance approvals in the case of research involving NHS staff or patients or Local Authority service providers or users).

YES / NO The design of this study ensures that the dignity, welfare and safety of the participants will be ensured and that if children or other vulnerable individuals are involved they will be afforded the necessary protection.

YES / NO I am confident that participants will be given all necessary information before the study, in the consent form, and after the study if necessary.

YES / NO I am confident the participants' confidentiality will be preserved.

YES / NO I consider that any risks involved to the student, the participants, and any third party are minimal.

YES / NO I consider that Departmental approval should be given, since ethical risks have been appropriately addressed in the proposal and I am confident that steps will be taken to minimise any risks.

Signature: **date:**

If a second opinion was sought from a research ethics expert, the advisor should also sign this form below:

Advisor's name (please print):

Advisor's signature: **date:**

Once the Jing's signature has been obtained, the student must return the completed form to the Jing Office.



CLIENT ASSESSMENT RECORD

Client details		Contact details	
Title	Surname	Telephone	
First name		Email	
DOB		Address	
Height	Weight		
Career	Hobby	Emergency contact name and number	
GP Details- Name			
Surgery address		GP surgery contact number	

Observable contraindications	Y/N	Contraindications (if not controlled)	Y/N	Precautionary conditions	Y/N
skin disorders any allergies myositis inflammation fractures phlebitis varicose veins burns airborne infections general fever glandular fever undiagnosed lumps unstable pregnancy		cardiovascular disease diabetes epilepsy disorders of the nervous system <u>disorders of the lymphatic system</u> auto immune disorders HIV and AIDS any unexplained weight loss <u>cancer diagnosis</u> thrombosis (DVT) neural disorders pneumonia		medically weak skin, bone, tissues haemophilia pregnancy undiagnosed musculo-skeletal disorders BP (high) hypertension/ hypotension (low) asthma headaches sinusitis menstruation digestive issues/IBS/reflux	

Health History	Y/N	Details
Any diagnoses? Or current medical conditions? Who by? When?		
Are you on prescribed medication? If yes, any side effects?		
Do you take any supplements? How do they make you feel?		
Are you currently receiving medical care? Or receiving treatment with another healthcare professional? Consultant? Physio?		
Complementary Health care? Osteopath/Acupuncturist/ Nutritionist?		
If required, permission given to have treatment?		

Declaration: I hereby confirm that the information stated above is accurate to the best of my knowledge. I further understand that thorough and honest responses to these questions are essential to my safety. I undertake to inform my therapist of any changes to the above information and understand there may be additional considerations based on my physical/emotional/psychological condition.

Client signature

Date

Informed consent:

I understand that an assessment needs to take place in order to establish a treatment plan. All assessment and treatment procedures have been thoroughly explained and I am happy to proceed.

I understand it is my responsibility to inform my massage therapist of any discomfort I may feel during the massage session so she may adjust accordingly.

Client signature

Date

Therapist signature

Date

Lucia Lloyd-Clokie.

GDPR May 2018: The data collected on this form will be used for the sole purpose of clinical massage and will not be disclosed to any external sources. For insurance purposes these records shall be kept for at least 7 years following the last occasion on which treatment was given.



Medical history:

To be completed by your therapist: Lucia Lloyd-Clokie

Ever had any Operations?
Or previous accidents? Or falls? Any MRI's or scans relevant to current concern? (Traumas to body? Mind?)
Previous aches? Pains? Illnesses?
Headaches? Digestion? Constipation?
How do you sleep? Position? Wake feeling refreshed?
Where would you put your energy levels on scale 1-10?
How was health as a child?
Your parents'?
What is your general attitude towards your health? Attitude to pain? Anything going on when noticed symptoms? Change of job/house/relationships? Belief in causes?
Have you had a diagnosis? Who from? How do you feel about your diagnosis? Have they been explained to you? Do they make sense? (Does it make sense?)
What do you feel is the root cause to your pain?
How long do you remember feeling like this, in pain?
E motions & Stress: Emotions connected to pain? Stress levels (0 low and 10 high) What helps you feel less stressed? What triggers additional stress?

Do you make time to relax and recharge? How?
Exercise? If yes, what type? How many times a week?
Do you have a hobby? An activity you enjoy? How often are you able to do them?
Any personal goals?
What are you wanting to achieve from today's session?
If I could wave a magic wand, what would you like to achieve during this first session? In 3 sessions? In 6 ?
Is there any compensation involved? How long has claim been going on
Do you talk to your family about it? Any family support/network? Are they supportive?
Work: How do you spend your days? ? Standing? Seated? Driving? Lifting Work contributing to issue? Enjoy work? Colleagues? Has the pain affected your ability to work? Do you enjoy your job?



Subjective: *What client tells you Today's pain scale 1-10*

origin provocation onset quality radiate site

Objective examination: body reading and ROM / what you observed
Notes



Notes

Objective Assessment: *What you assess to be presenting issues* establish Functional Benchmarks:
Benchmarking: What is pain preventing you from doing? On worse day pain scale 1-10

- 1.
- 2.
- 3.

S – (specific, i.e. turn over in bed)
what client wants to do
M – (measurable) hand walk up wall/km ran/
walked/weight lifted/stairs taken
A – (achievable) pacing, proprioceptive stretches/
exercises, positive affirmations
R – (realistic) pacing, check in at session 3/6
T – (time) 4 weeks/6 wks/3 months

Assessment ROM & PX Benchmarks: ROM tests: restrictions + px/10

Joint	Movement	Active	Symptom	Passive	Symptom	Resisted	symptom

Special tests:

Plan: How are you going to treat the presenting issues?

**RE-ASSESS ROM PX At end of session
After care recommendations**



Date	Treatment (feedback + reflective practice)	Initials



Re-assess



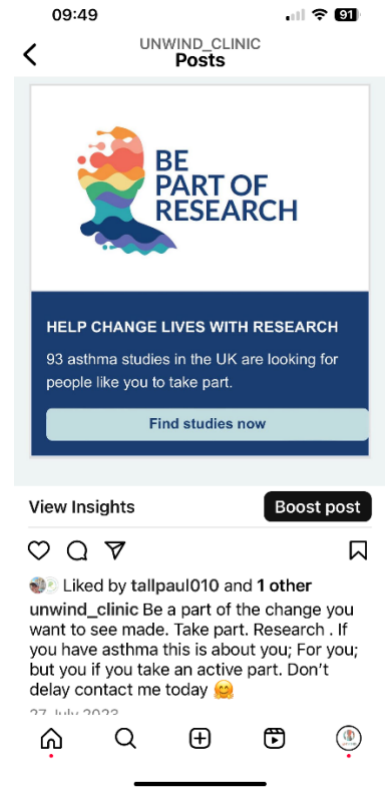
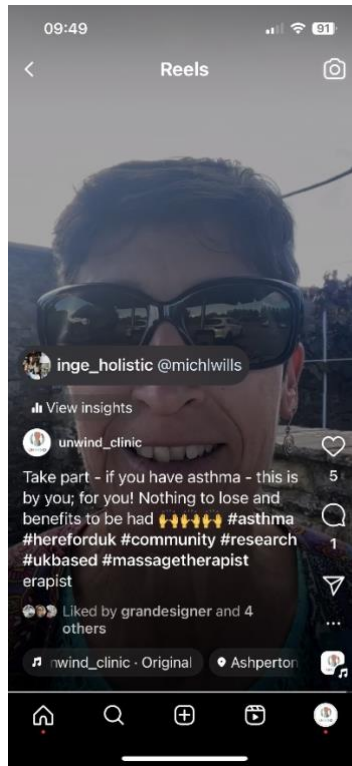
Notes

Assessment ROM & PX Benchmarks: ROM tests: restrictions + px/10

Joint	Movement	Active	Symptom	Passive	Symptom	Resisted	symptom

Date	Treatment	Initials

(4) Social Media Advertising: Instagram Reels and Posts



“Good morning,
If you have an asthma diagnosis, and you are in the Hereford, Ledbury or Ashperton area and would be willing to take part in a study receiving 6 subsidised treatments, please contact me. Thank you.”

“1 in 11 people have asthma. So if that’s you, contact us and we’ll make sure you get on to the research project. And we’ll have some really interesting discoveries to make.”

Be part of the change you want to see made.
Take part.
Research.
If you have asthma this is about you; For you; take an active part.
Don’t delay contact me today.

(5) Massage Protocol followed for intervention period



Advanced Massage + Training

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RIBS, THORAX AND ABDOMEN

HOLISTIC MEDICAL MASSAGE

SERIES

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Holistic Medical Massage for Ribs, Thorax and Abdomen

This course is part of our Holistic Medical Massage Series.

The entire series is designed to give you the confidence to treat real people and their real pain conditions

Other courses in the series include:

- o Foundation Course in Holistic Medical Massage
- o Holistic Medical Massage for Low Back Pain
- o Holistic Medical Massage for Neck and Shoulder Pain
- o Holistic Medical Massage for Shoulder Girdle Pain
- o Holistic Medical Massage for Carpal Tunnel Syndrome
- o Holistic Medical Massage for Leg Knee and Foot Pain
- o Holistic Medical Massage for Hip and Pelvis
- o Holistic Medical Massage Advanced Stretching Techniques

This course will introduce you to effective techniques to treat pain conditions in this area.

We will share with you our experience in successfully treating clients, easily moving them out of chronic pain in 1-6 clinical sessions.

We hope you enjoy it.

Meghan and Rachel

IMPORTANT

Please note this course manual is designed to help you remember techniques taught on authorised Jing courses. It is not intended to be a substitute for hands-on teaching and is not designed to be passed on to others who have not attended our courses.

Most importantly, techniques taught on Jing courses are for your uses as a massage therapist and are NOT INTENDED TO BE USED TO TRAIN OTHERS. The methods and techniques we teach are drawn from a wide range of sources and of our experience of many years as teachers and practitioners in the massage industry. We would ask you to respect our work and dedication to you by not reproducing our methods and techniques in any other format to train others without asking our permission.

BODY READING

“Seeing is touch at a distance” – Ida Rolf

Visual assessment or body reading can help us determine what soft tissue structures are short and tight in our clients. This enables us to develop short and long term strategies to take clients out of pain and move them towards a more optimal, functional and pain free structure.

Many forms of bodywork including chiropractic, physiotherapy, and Alexander technique use an analysis of standing posture as a guide for forming a treatment strategy.

There are 4 main steps in body reading:

- o What is the skeletal geometry?
- o What is the soft tissue pattern that is holding the person in that position? Ie:
Muscle, fascia, anatomy trains
- o What is the story that explains as much of you can see of the pattern?
- o Story leads you to a strategy: for next minute, next session or series of sessions.

What do I do next?

After you have carried out your strategy, look again; if your strategy worked the skeletal geometry will be different. If it didn't work you have to go back and use different strategy or go back to your theory.

BODY READING LANGUAGE

The simple and straightforward system below was developed originally by Rolfing practitioner Michael Moorcock and has been popularised by Tom Myers via his school of Kinesis Movement Education (KMI).

- o The terms describe the relationship of one bony portion of the body to another, or occasionally, to the gravity line, horizontal or some other outside reference.
- o The 4 terms used are: tilt, bend, rotate and shift. These terms are modified with the standard positional adjectives: anterior, posterior, left, right, superior, inferior, medial and lateral.
- o It is important to clarify which 2 structures being compared ie: anterior tilt of the pelvis; we need to clarify if the pelvis is anteriorly tilted compared to the femur or compared to the ground.

TILT

- o When the top of a structure goes off vertical ie: a body part that is higher on one side than another. Named for the direction to which the top of the structure is tilted (Think "which side is the milk spilling out of the saucer?")
- o Eg: left pelvic tilt; the right hip bone is higher than the left.
- o Anterior pelvic tilt: pubic bone goes anterior relative to the PSIS
- o Right side tilt of head: the left ear is higher than the right
- o Posterior tilt of head- the eyes look up
- o Commonly applied to shoulder girdle, rib cage, pelvis and tarsum of feet

ROTATION

- o Usually occurs around a vertical axis
- o Commonly applies to femur, tibia, pelvis, spine, humerus or rib cage.
- o Singular structures (ie: rib cage): named for direction in which the front of the named structure is pointing (think "where is the light shining") ie: left or right rotation of rib cage.
- o In paired structures we use medial or lateral rotation ie: medial rotation of the knees

SHIFT

- o Where the centre of gravity of a segment is displaced
- o Modified by the terms: Right/left; anterior/posterior; superior/inferior
- o Good example is Balinese dancing

BEND

- o Series of tilts: Usually applied to spine

Assessment Techniques for Ribs and Thorax

Body Reading the ribcage

- o How is the ribcage seated over the pelvis?

TILT

- o A tilt can be left/right or anterior/posterior
- o Anterior tilt: not very common
- o Posterior tilt: most common

SHIFT

- o In a shift of the ribcage, the ribcage stays on the vertical axis but is shifted to one side. A shift is usually a left or right shift.

ROTATION

- o Can be left or right rotation ("which way is the light shining?")
- o Notice whether the shoulder girdle goes with the rotation or stays straight.

Breath assessment

There are 2 main movements of the ribs in breathing:

1. "Pump handle": Ribs move superiorly and inferiorly on inhale and exhale
2. "Bucket handle": the ribs also come anteriorly and superiorly on inhale. On the exhale they move inferiorly and posteriorly.

Because of the orientation of the costal transverse joints, the upper ribs have more of a "pump handle" movement while the lower ribs have more of the "bucket handle" movement.

In general, the lower ribs move the most; the upper ribs move to a lesser degree. Take this into account when body reading the breath.

Standing

- o Notice where the ribcage moves on the breath and where it doesn't.
- o Does the breath move freely on both phases: inhale and exhale?
- o Does the ribcage move in all directions? Anterior/posterior/laterally?

Supine

- o When the client is on the table, the back of the ribcage is secured and the abdominal wall is more free. This means that you are likely to see more movement in the belly than in the standing position.
- o Assess for freedom of movement of the breath in each area.
- o Notice if the client is using the scalenes to breathe while supine. If they are this indicates a strong restriction in the ribcage.
- o Tempo: Is there a predominance on inhale or exhale?
- o Look for side to side differences: can watch from head of table.

Prone

- o Observe your client prone to see where there is movement or not. Often restrictions can be more obvious in this position.

Testing mobility of chondrosternal and chondrocostal joints

Chondro= cartilage

Costal= rib

Therefore chondrosternal joint- joint between sternum and rib cartilage

Chondrocostal: joint between rib cartilage and bone of rib

Assessment technique:

- o Client seated. Both hands are placed behind their head.
- o Standing behind, place your arm around the client so your fingers are on the chondrosternal joint.
- o With you other hand push the shoulder and ribcage forwards. Your fingers should feel like they are going posterior if there is no fixation.
- o Work down the chondrosternal joints to the bottom of the sternum.
- o For chondrocostal joints move the fingers lateral from the sternum until you feel the joint between the cartilage and the bone.

- o Repeat the technique working the chondrocostal joints.

Testing mobility of costovertebral joint

This is the joint between the rib and the transverse processes. It is found one finger width from the spinous processes of the vertebra.

- o Client sidelying. Place the thenar eminence or thumb in the lamina groove

- o With your other hand push the clients shoulder away from you so you can test the mobility of the costovertebral joints.

- o Work your way down the spine noticing where you find any restrictions.

Check viscoelasticity of lung: “bouncy castle technique”

- o Divide the ribcage into 4 portions: left upper/lower and right upper/lower

- o With hand over hand technique, compress each segment and note the viscoelasticity (rate of return)

RIBS THORAX AND ABDOMEN PROTOCOL

Prone

o Breath Observation: Observe where your clients spine and back moves with the breath and where appears to be restricted.

o Bringing Awareness to the Breath: Place your hand on the area that is restricted and ask your client to bring their attention to that place with the breath. Allow them to go through several breath cycles to encourage awareness and change.

Remove your hand and observe any differences in the breath following treatment.

o MFR Cross Hand Stretches: Use MFR cross hand stretches over the whole area to release fascial restrictions. Place your 2 hands 3-5 inches apart; sink into the tissues and with intention separate your hands away from each other. Follow the movement of the tissues and release the stretch when there is no more effective change.

o Working the lamina groove: Work the lamina groove as per Jing low back course.

This helps to free restrictions in the costovertebral joints.

o Working posterior and lateral ribs: With a small amount of wax or oil work the posterior and lateral ribs from medial to lateral. Stand at the opposite side of the table in Tai chi stance. Place your fingers in between the ribs to work the internal and external intercostals and slowly strip away from you. Work any restrictions or trigger points that you find.

o Serratus Posterior Superior: This muscle lies underneath the rhomboids and trigger points can be responsible for issues with breathing. Strip the muscle from medial to lateral. Focus your intent and pressure below the rhomboids to effectively treat this muscle.

o Release Quadratus Lumborum: As per Jing Low back course or any other techniques you know.

o Optional strokes: If your client has congestion or mucus issues you can add lots of great tapotement strokes here: cupping, hacking and chopping are all effective in helping to mechanically clear the lungs.

o Repeat Breath Observation: Note whether your intervention has made a difference to the volume, rhythm and depth of the breath.

Sidelying

- o Clearing iliac crest with fingers: Work from medial to lateral (windscreen wipers)
- o Work lateral line of body: Mould your hands snugly to the contours of the body and work up towards shoulder girdle. Client can reach hand overhead to aid release.
- o Work Serratus Anterior: Serratus anterior attaches to ribs 1-9 and hugely impacts breathing. Restricted breath pattern can often be due to problems with serratus. With one hand take the clients arm below the elbow and use the other hand to work the upper fibres of serratus under the armpit.
- o Then ease your finger tips between the subscapularis and the serratus anterior. Put the clients arm back down so it rests on your arm. Use your other hand to mobilise the scapula. Work the fascia in between subscapularis and serratus anterior.
- o Anterior Q.L: Ease your fingers around to the anterior side of the Q.L. Treat any trigger points by waiting and holding for a release. Client movement (dropping hip away towards feet and back) can aid release.
- o Subclavius: Curl your fingers and thumb around the clavicle so you are able to feel any restrictions in the subclavius muscle. Treat with gentle cross fibre friction or using your listening touch to wait and hold for a release.
- o Freeing the costo vertebral joints:
 - o Client sidelying. You face their chest. Place the thenar eminence or thumb in the lamina groove above the spinal segment you are working on.
 - o With your other hand push the clients shoulder away from you so you can test the mobility of the joint.
 - o As you come across any restrictions, wait and hold and use your listening touch to let the tissues take you into a position of release.

Lateral Breath Compressions

- o Encourage your client to breathe normally and place your hands snugly around the ribs on the lateral side of the body. Follow the breath with your hands for a few cycles.
- o Then on the out breath follow the breath all the way to the end and with gentle pressure encourage greater expiration.
- o On the in breath resist the expansion of the ribcage so the client has to work against your pressure. Follow all the way to the maximum point like surfing a wave!
- o Repeat for several cycles.
- o Then release pressure and encourage your client to breathe normally just with your light contact.

Supine

Sternum and Chest

Clinical Benefits: Working the sternum and chest is used clinically in the treatment of respiratory problems such as coughs due to colds, allergies, bronchitis, asthma and stress related digestive disorders such as IBS.

o Work the chest with paddy pawing palming technique: Stand at head of table in Tai Chi Stance and lean alternately into chest area.

o MFR Cross Hand Stretch over chest area: Place your 2 hands 3-5 inches apart on the chest area. Sink into the tissues and with intention separate your hands away from each other. Follow the movement of the tissues and release the stretch when there is no more effective change.

o Palm the sternum: Slowly palm down the sternum using hand over hand technique.

o Specific Work on Sternum: Follow with circular digital pressure (CDP) down the sternum; as your hands get further down the sternum you will be able to use both fingers and palmar pressure. This stroke affects portions of the Lung, Heart and Heart Envelope Tendino Muscle channels in Traditional Chinese Medicine.

Alternate hands and repeat up to 3 times with each hand.

o Work the intercostal spaces: Start beside the sternum and work laterally. Work one side at a time. You can either work each space individually or work 3 spaces at a time using the index, third and fourth fingers.

o Work lateral ribs: Stand at side of table and use fingers to work in the intercostals spaces from medial to lateral. Liver Qi is often obstructed in this area and interferes with smooth digestion. Stagnant Liver Qi also causes increased emotionality and illness. Smooth flowing Liver Qi is essential for emotional well being.

o Stripping intercostals: Apply wax or oil and from opposite side of table work between intercostals from medial to lateral. Start with broad work with heel of hand then work individually between intercostals with fingers.

o Subclavius: With same stripping movement work deeply under clavicle to reach restrictions in subclavius. This work can be enhanced by asking your client to move to the side of table and drop their outstretched arm slowly towards the ground with the stroke.

o Pec Major: Strip Pec major from medial to lateral using broad work with the heel of the hand.

This technique helps to move energy down out of the emotional centre, promoting calming. Eastern medicine traditionally recognises the emotions as a primary cause of disease. The technique can be repeated several times during the course of the treatment.

o Pectoralis Minor with movement: Kneeling at side of table press up and under the pec major and work towards the midline of the body until you feel the "rope like" quality of the pec minor. To aid release get your client to do a "backstroke" type movement slowly over the head.

o Scalene release with movement: Use techniques from Jing Neck and Shoulder to release trigger points in scalenes. As an alternative or an addition, in seated stance, palpate under the SCM to locate the scalenes. Ask your client to turn their head slowly to the other side while you are applying pressure to get a release.

o Diaphragm: Standing at the side of the table, gently compress the ribs with one hand and with the other curl your fingers under the costal edge to treat the diaphragm. Use static pressure or very gentle cross fibre friction.

o "Bouncy castle" technique: After assessing the viscoelasticity of the different segments of the ribcage; place one hand on the upper portion and one on the lower portion. Compress and "follow the listening"

o After treating re-assess to see if your intervention has made a difference.

o Breath Compressions: Through observation note where the breath is most restricted. Place hands on the chest and use a similar technique to the lateral breath compressions to optimise the breath.

(6) Feedback form sent out in week 16



Asthma Research Study Feedback form

How did you hear about the asthma research study?

Why did you join the asthma research study?

How central is being an asthmatic to your self-identity? Make **bold** one word.

Negative Positive Neutral

What is your perception of your asthma?

What does being an asthmatic mean to you?

What did you like best about the massage therapy treatments received?

What did you like least about the massage therapy treatments received?

How have you benefitted from the massage therapy treatments received?

Would you have preferred more massage therapy sessions?

If yes, Why? And how many?

Did you benefit from the online session? Or from the recording of the online session?

What did you find most useful from the self-care instructed recording?

What did you like least about the self-care instruction?

How have you benefitted from the self-care practices?

Would you like the self-care component taught? Please **make bold** all that apply.

In-person 1-2-1

online 1-2-1

in-person as a group

online as a group

pre-recorded

No preference

How motivated were you to practice the recorded self-care program?

When you practiced the recorded self-care program how engaged were you?

How much have you benefitted from the asthma interventions (massage and self-care techniques) received? Please explain further if you can.

How and why, do you think you have or haven't benefitted from the asthma interventions (massage and self-care techniques)?

How have these benefits improved your everyday life?

Is there anything in the research study you would have liked to have been different? Or you would like to add? If so, what?

After participating in the study how do you perceive your asthma now?

What did you enjoy about working with me?

What would you tell a friend to encourage them to seek clinical massage therapy with me?

Thank you for taking the time to complete this questionnaire. It has been such a pleasure to work with you on this study, and I hope you will continue to have massage therapy treatments with me.

Lucia Lloyd-Clokie