Evaluating the Jing Method of Advanced Clinical Massage on Pain and Quality of Life in Women with Endometriosis

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March 2026

Total word count: 4385

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

"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 of Massage and Complementary Medicine. 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".

Miss Chloe Cash: _____

Date:

ABSTRACT

In this Study I use the terms "woman" and "women". However, it is important to note that endometriosis can affect all people assigned female reproductive organs at birth.

Aim: To evaluate the effects of the Jing Method of advanced clinical massage on pain and quality of life in women with endometriosis.

Method: 12 participants were recruited, with 11 participants completing the study. All participants had a confirmed diagnosis of endometriosis. A "within subject design" study was carried out over a 16-week period. Week 1-6 assigned as a control phase, week 7-12 assigned as an intervention phase, and week 13 to 16 as a follow up phase to assess for any lasting effects. Throughout the study the participants completed three questionnaires to evaluate pain and their health-related quality of life. These included the POQ-SF, which was completed on a weekly basis, along with the EHP-30 and the BSGE Pelvic Health Questionnaire, which was completed on week 1, 6, 12 & 16. Throughout the treatment phase the participants received three 60-minute hands on treatments using elements of The Jing Method lower back, stress and chronic pain and advanced myofascial release protocols on week 7, 9, 11. And three group online treatments on week 8,10, 12 using self-massage, acupressure, meditation, breath work, prescription exercise and stretching. Participants also received 3 self-care exercises making up a routine no longer than 10 minutes, and they were advised to complete these 3 times in-between the in-person sessions.

Results: The results of this study show improvements across all outcome measures, positively impacting pain and improving quality of life in women with endometriosis. With the mean pain scores across all questionnaires showing marks decrease compared to the intervention phase, with benefits largely maintained during the follow up phase. Pain outcome scores showed a mean improvement of 16% from the control phase to the intervention phase, the further 17% improvement during the follow up phase, resulting in an overall 33% reduction in pain related outcomes from week1 to week 16. Improvements were observed not only in pain intensity but also in mobility, activities of daily living, vitality, negative effect, and fear avoidance behaviours.

Conclusion: The findings suggest that the Jing Method of advanced clinical massage, delivered through a multimodal and biopsychosocial framework, may be a valuable adjunctive approach for managing pain and improving quality of life in women with endometriosis. While results are promising further research with larger sample sizes and controlled study designs is recommended to strengthen at the evidence base.

TABLE OF CONTENTS

ABBREVIATIONS

ADL – Activities of Daily Living

BPS – Biopsychosocial

C&P – Control and Powerlessness

EHP-30 – Endometriosis Health Profile (30 questions)

EW – Emotional Wellbeing

HFMAST – Heat, Fascia, Muscle, Acupressure, Stretching, Teach Self-Care

HRQoL – Health Related Quality of Life

MFR – Myofascial Release

MRSQ – Menopause Rating Scale Questionnaire

NA – Negative Affect

PA – Physical Activity

POQ-SF – Pain Outcome Questionnaire (Short Form)

SI – Self Image

SS – Social Support

TA – Therapeutic Alliance

LITERATURE REVIEW

Endometriosis: Definition and Impact

Endometriosis is a chronic estrogen-dependant gynaecological condition (As-Sanie et al., 2025), that affects an estimated 10–15% of women of reproductive age worldwide (K. Becker et al., 2021), where endometrial lesions are found outside the uterus (Parasar et al., 2017). These lesions can involve multiple organ systems, including the bowel and bladder, and in rare cases can spread to extrapelvic areas such as cutaneous and thoracic sites (Allaire et al., 2023).

Endometriosis is a complex, systemic disease associated with chronic inflammation, fibrosis, and the formation of adhesions that bind organs and tissues together, reducing mobility and impairing normal physiological function (Maddern et al., 2020), and increases the likelihood of autoimmune dysfunction and disease (Gruber & Mechsner, 2021). The clinical presentation is highly heterogeneous. Common symptoms include chronic pelvic pain, dysmenorrhoea, dyspareunia, abnormal uterine bleeding, and infertility (Laganà et al., 2015). However, many women also experience multisystem comorbidities, including irritable bowel syndrome, painful bladder syndrome, pelvic floor dysfunction (Horne & Missmer, 2022), central nervous system sensitisation (Rogers et al., 2009), and psychopathological conditions such as anxiety and depression (Sepulcri & Amaral, 2009) are common comorbidities in women with endometriosis. These symptoms significantly impair quality of life and daily functioning underscoring the importance of awareness and timely diagnosis and treatment (Szypłowska et al., 2023).

Table 1: *Common symptoms of endometriosis, highlighting the wide range of physical, psychological and functional impacts that can be experienced by affected individuals. (Dunselman et al., 2014; Horne & Missmer, 2022; Hunsche et al., 2023; Maddern et al., 2020)*

Symptom/Impact	**Description/Details**
Dysmenorrhea	Severe menstrual pain affecting daily life
Chronic Pelvic Pain	Persistent pelvic pain, cyclic or non-cyclic, linked to bladder and bowel function
Dyspareunia	Pain during sexual intercourse
Infertility	Difficulty conceiving, common in endometriosis patients
Heavy Menstrual Bleeding	Excessive menstrual flow
Cyclical Gastrointestinal	Painful bowel movements (dyschezia), bloating, nausea,
Cyclical Urinary Symptoms	Painful urination (dysuria), blood in urine (hematuria)
Fatigue	General weariness and tiredness
Back and Abdominal Pain	Additional pain sites reported
Shoulder Tip Pain	May indicate extra-abdominal endometriosis
Psychological Symptoms	High prevalence of depression and anxiety correlated with pain intensity
Sleep Disturbances	Frequent waking due to pain
Social and Work Impacts	Reduced participation in social events, work productivity loss

In the United Kingdom, endometriosis affects approximately one in ten women (Rogers et al., 2009), and according to the Royal College of Obstetricians and Gynaecologists (2017) identifies it as the second most common gynaecological condition in the UK. Due to its chronic and progressive nature, endometriosis represents a significant medical, social, and economic burden, with an estimated annual cost of £12.5 billion attributed to treatment, loss of work, and healthcare provisions (Horne & Missmer, 2022). Despite the diseases prevelance, many women

with endometriosis experience significant delays between symptom onset and receiving an accurate diagnosis, typically ranging from 8 to 11 years (Rogers et al., 2009). This is largely due to its complex symptomatology, which often mimic other conditions leading to misdiagnosis (Ye et al., 2022) (see image 1).

	Alternative conditions	Common symptoms of endometriosis: Dysmenorrhea	Common symptoms of endometriosis: Nonmenstrual pelvic pain	Common symptoms of endometriosis: Deep dyspareunia	Clinical features of alternative conditions
GYNECOLOGIC CAUSE	Adenomyosis	✓	✓	✓	Heavy menstrual bleeding; tender uterus (which is sometimes enlarged); commonly co-occurs with deep endometriosis
GYNECOLOGIC CAUSE	Uterine fibroids	✓	✓	✓	Heavy menstrual bleeding; enlarged or irregular uterus
GYNECOLOGIC CAUSE	Primary dysmenorrhea	✓			Often short duration (<72 h) and responsive to nonsteroidal anti-inflammatory drugs
GYNECOLOGIC CAUSE	Cervical stenosis	✓	✓		Absence of menstrual period (amenorrhea) or decreased menstrual flow; history of cervical surgery or ablation of uterine lining
GYNECOLOGIC CAUSE	Müllerian anomaly with obstruction of genital tract	✓	✓		Amenorrhea with cyclic pain often diagnosed in adolescence
NONGYNECOLOGIC CAUSE	Pelvic floor myofascial pain	✓	✓	✓	Pain worse with activity and/or at end of day; tender abdominal wall or pelvic floor muscles; can be associated with painful bowel movements (dyschezia), constipation, urinary frequency
NONGYNECOLOGIC CAUSE	Irritable bowel syndrome		✓		Changes in bowel frequency and stool quality with associated abdominal pain; symptoms may be worse during menses
NONGYNECOLOGIC CAUSE	Bladder pain syndrome/ interstitial cystitis		✓	✓	Urinary urgency, urinary frequency, and/or nocturia with normal urinalysis; symptoms may be worse during menses
NONGYNECOLOGIC CAUSE	Pelvic venous disorder		✓	✓	Pelvic heaviness that is worse when standing and at end of the day

Figure 1: *Gynaecologic and nongynaecologic conditions with symptoms that overlap with endometriosis (As-Sanie et al., 2025).*

Currently there is no known cure for endometriosis (Symons et al., 2018). Conventional treatment focuses on symptom management, particularly pain and infertility, and attempts to slow disease progression through hormonal and surgical interventions (K. Becker et al., 2021). Hormonal therapies aim to suppress ovulation and menstruation, thereby reducing estrogen-driven inflammation. While effective for some, these treatments often produce undesirable side effects and may not be suitable for long-term use (Horne & Missmer, 2022). Surgical intervention, particularly excision of lesions, can reduce disease burden and pain, but is not

always curative, especially in cases of delayed diagnosis or deep infiltrating disease. Recurrence is common if lesions are incompletely removed, (Parasar et al., 2017) and repeated surgeries are generally discouraged due to limited evidence of benefit and increased risk of complications (Rogers et al., 2009).

The role of Complementary and Alternative Therapy and Self-Management Strategies

Many women still experiencing pain and symptoms despite receiving surgical and/or hormonal treatment, find themselves seeking alternative self-management strategies (Schwartz et al., 2019), with reports that heat, acupressure, myofascial release, massage, meditation and breathwork, exercise and stretching are effective modalities (Evans et al., 2019; Marqui, 2014; Sanchez Vera et al., 2023). While these approaches do not replace standard medical care, evidence suggests they may reduce pain and improve quality of life (Mercier Des Rochettes et al., 2025).

The diverse symptoms of endometriosis justify exploring complementary and alternative treatments. Chronic inflammation, adhesions, and neuroangiogenesis activate nociceptive pathways, contributing to peripheral and central sensitisation (see figure 2). This process is associated with muscle hypertonicity, myofascial trigger points, and fascial restrictions, all of which can exacerbate pain and restrict movement (Sanchez Vera et al., 2023). Psychological comorbidities further compound symptom burden. Anxiety and depression are strongly correlated with pain intensity, with evidence suggesting a relationship in which pain exacerbates psychological distress and distress amplifies pain perception (Szypłowska et al., 2023). The presence of anxiety and depression may also lead to lower pain tolerance and greater sensitivity to physical sensations, and potentially reinforce fear avoidance patterns that

significantly impairs a persons ability to engage in physical activities and daily living tasks (Sepulcri & Amaral, 2009).

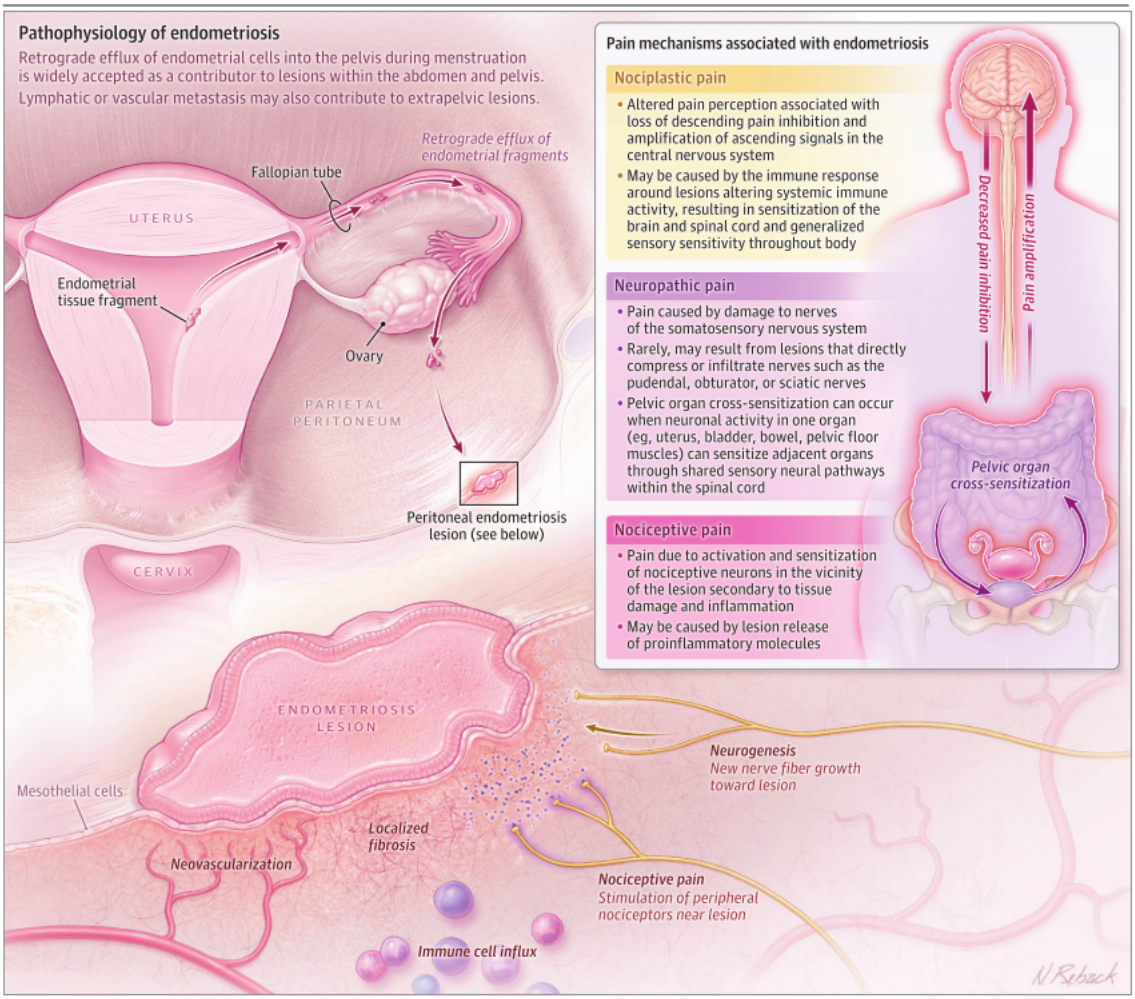

Figure 2: *Pathophysiology and pain mechanisms in endometriosis-associated pelvic pain (As-Sanie et al., 2025)*

Complementary and alternative therapies have the potential to stimulate structural and chemical change within the body's systems and tissues by addressing factors such as fascial restrictions, trigger points and a heightened nervous system (Pastore & Katzman, 2012), with therapeutic touch shown to improve body awareness and support positive changes in pain modulation (Thiel et al., 2024), combined with a strong therapeutic alliance to support clients

pain education, which reduces fear associated avoidance of activity (Desroches, 2024), it is possible to improve pain, function and quality of life, and empower and educate women to understand their pain, feel in control of their condition, with the possibility of self-management strategies (Mardon et al., 2023).

Evidence for Manual and Complementary Therapies

A growing body of research has explored manual and complementary therapies for dysmenorrhoea and endometriosis-related pain. Although methodological quality varies, findings consistently report reductions in pain severity and improvements in patient-reported quality of life.

Valiani et al., 2010 investigated massage therapy for dysmenorrhoea and reported a 34.8% reduction in pain severity immediately following treatment, increasing to 65.2% at six-week follow-up. While promising, the small sample size (n = 23) and absence of a control group limit the strength of conclusions.

In a larger controlled study, Şolt & Dolgun, (2022) examined the effects of acupressure in 90 participants and found significant reductions in menstrual pain at 30, 60, and 120 minutes post-intervention. However, longer-term outcomes were not assessed. Similarly, Sert et al., (2025) demonstrated that myofascial release was more effective than TENS or exercise alone in reducing pain and abdominal tension in women with dysmenorrhoea, with benefits maintained four weeks post-treatment.

Two encouraging studies by Özgül et al., 2018 and Reis et al., (2010) suggest that massage may influence both local tissue structures and autonomic nervous system response contributing to pain relief. The 72 young women recruited in the Reis Click or tap here to enter text.study

showed a significant reduction in systemic symptoms and menstrual pain after receiving lumbar connective tissue massage twice weekly while they were not menstruating, during 3 menstrual cycles. The results justify performing a randomised clinical trial to confirm whether such an effect exists or not. Özgül et al., 2018 did use a control group with a total of 44 women participating (n=21 treatment group, n=23 control group). These results showed a significant improvement in pain medication. Yet both these studies do not assess the longer term benefits of massage therapy.

Muñoz-Gómez et al., 2023 provided longer-term data, demonstrating sustained improvements in pelvic pain and lumbar mobility at six-month follow-up following a manual therapy protocol. However, psychological and social outcomes remained unchanged, suggesting that pain reduction alone may be insufficient to address the broader impact of endometriosis.

More integrative approaches such as in studies by Cleverley, 2025 reported improvements in pain and quality of life following a massage-based intervention emphasising self-care and therapeutic alliance, with effects maintained four weeks post-treatment. And Rodríguez-Ruiz et al., 2024 similarly demonstrated reduced pain and improved sleep and sexual function following a multisensory programme combining hydrotherapy and massage, though accessibility and limited follow-up remain concerns. These studies extend outcome measures beyond pain intensity, aligning with biopsychosocial models of care.

A multimodal intervention evaluated by Shrikhande et al., 2023 incorporating physiotherapy, manual therapy, education, and lifestyle guidance, further supports this approach. Substantial pain reductions were observed at three-month follow-up, although the contribution of individual components could not be isolated.

Self-Management and Empowerment

Self-management strategies play a crucial role in empowering women to take an active role in managing endometriosis (Benvenuti et al., 2026). Heat therapy has consistently demonstrated short-term pain relief (Armour et al., 2019; Leonardi et al., 2020) to be an effective self management strategy to provide temporary pain relief, while practices such as yoga have shown promise in reducing pain and improving wellbeing (Gonçalves et al., 2017).

Online adaptations of the Jing Method of Clinical Massage Therapy, incorporating exercise, breathwork, stretching, and self-massage, have demonstrated improvements across a range of symptoms including anxiety, depression, bladder function, and sexual health (Hyde, 2021; Mitchell. 2023; and Hurworth. 2023). These findings support the importance of accessible, problem-focused self-care strategies that enhance confidence, reduce stress, and provide women with practical tools for symptom management. (Leonardi et al., 2020).

The Role of The Jing Method in treating Chronic Pain

The Jing Method of advanced clinical massage therapy as defined by (Fairweather & Mari, 2015) is a multimodality treatment approach for chronic pain that combines eastern and western body work techniques. Starting with an indepth consultation and following the HFMAST (heat, fascia, massage, accupressure, self-care, teaching) protocol, it aims to empower clients to understand their pain and create a compassionate and caring connection using the biopsychosocial model at the forefront of client-centred care to build a strong therapeutic alliance throughout the treatment journey.

This approach is particularly relevant to endometriosis, a condition in which pain severity does not consistently correlate with tissue damage (Mercier Des Rochettes et al., 2025), and is

influenced by biological systems, psychological well-being, and social functioning simultaneously (Ossipov et al., 2010). Evidence has shown that a good therapeutic alliance can positively influence the treatment outcomes (D'Alfonso et al., 2020), which is especially important given the history of dismissal and delayed diagnosis experienced by many women with endometriosis.

Therefore this sudy seeks to understand if the Jing Method of advanced clinical massage used both in person and delivered in an online self-care format could be a viable option to the current standard medical treatment aiming to reduce and improve quality of life in women with endometriosis.

METHOD

Ethical approval for this study, *Evaluating the Jing Method of Advanced Clinical Massage on Pain and Quality of Life in Women with Endometriosis*, was obtained from the Jing Institute prior to commencement (see Appendix 1). A literature review was undertaken to inform the study design and methodology. Sources included Google Scholar, Mendeley, and previous research conducted by Jing BTEC students.

Participants were recruited using a social media campaign and the distribution of posters in local venues, including chiropractic clinics, gyms, and hairdressing salons. Eligibility criteria required participants to have a confirmed diagnosis of endometriosis and to be experiencing pain that impacted quality of life. Participants were required to commit to the full 16-week study, which included attending in-person treatments, and group online treatment, and completing all questionnaires within the specified times.

Following an expression of interest, prospective participants were provided with an information letter outlining details of the study along with the study schedule (table 2) and invited to attend a 30-minute one-to-one video consultation to discuss the study in detail and familiarise themselves with the questionnaires used. Participants who agreed to take part then completed an on-line consultation and provided written consent.

This study is a within-subject design, where all participants were exposed to every condition of the intervention. To minimise variables, participants were asked to refrain from receiving any additional massage or bodywork therapies during the study period and to avoid changes to existing medical treatment. Prescribed medications were to be continued as usual. Any changes to medication or treatment during the study were documented alongside reported feedback.

Three validated questionnaires were used to assess outcomes: the Pain Outcome Questionnaire – Short Form (POQ-SF), the Endometriosis Health Profile (EHP-30), and the British Society for Gynaecological Endoscopy (BSGE) Pelvic Pain Questionnaire. Questionnaires were sent by email at 9 a.m. every Sunday at the end of each week to be completed within 24 hours, and prior to treatment.

The POQ-SF assesses the impact of chronic pain on daily functioning, emotional wellbeing, vitality, and pain-related fear and avoidance behaviours. The EHP-30 evaluates health-related quality of life in women with endometriosis across five domains: pain, control and powerlessness, emotional wellbeing, social support, and self-image. The BSGE Pelvic Pain Questionnaire is a standardised NHS tool used to assess and monitor chronic pelvic pain.

During the control phase of the study (weeks 1-6) baseline measurements were established with the POQ-SF at weeks 1, 2, 3, 4, 5, and 6, and the EHP-30, and BSGE at weeks 1 and 6 only.

The intervention phase took place over weeks 7-12. Participants received three 50-minute hands on treatments on a Monday or Tuesday of weeks 7, 9, 11, incorporating all elements of HFMAST (heat, myofascial release, massage, acupressure, stretching and self-care) using techniques from The Jing Method lower back, stress and chronic pain and advanced myofascial release protocols (see appendix 5). Following the treatment, the participants were taught a short self-care routine to complete three times a week in-between the treatments, supported by a prerecorded video and a PDF handout (see appendix 6, 7 and 8). The participants the number of times they completed the self-care. A 45-minute group online treatment was delivered every Monday at 7:30pm on weeks 8, 10, 12 using self-massage, acupressure, meditation, breath work, exercise and stretching (see appendix 9). During the intervention phase of the study the

POQ-SF was completed at week 7, 8, 9, 10, 11 and 12, and the EHP-30, and BSGE at week 7 and 12 only.

Week 13 -16 was the follow-up phase. On weeks 13, 14, 15 and 16 the POQ-SF was completed, with the EHP-30 and the BSGE Pelvic Pain Questionnaire completed on week 16 to assess longer-term effects post-treatment.

Table 2: *Study schedule*

			Pain outcomes questionnaire	EHP-30 Questionnaire	BSGE Questionnaire
			Sent 9am on a Sunday for completion within 24 hours		
Pre study	Online consultation and sign consent form				
Week 1			7th September	7th September	7th September
Week 2			14th September		
Week 3			21st September		
Week 4			28th September		
Week 5			5th October		
Week 6			12th October	12th October	12th October
Week 7	**Hands on** treatment at a scheduled time week of 13th October	10 minutes of self-care exercises to be dome 3x during the	19th October		
Week 8	**Online** Treatment Monday 20th October 7:30pm		26th October		
Week 9	**Hands on** treatment at a scheduled time week of 27th October		2nd November		

Week 10	**Online** Treatment Monday 3rd November 7:30pm		9th November		
Week 11	**Hands on** treatment at a scheduled time week of 10th November		16th November		
Week 12	**Online** Treatment Monday 17th November 7:30pm		23rd November	23rd November	23rd November
Week 13			30th November		
Week 14			7th December		
Week 15			14th December		
Week 16			21st December	21st December	21st December
Post study	Complete feedback (optional)				

RESULTS

Out of the 12 participants that were recruited 10 completed the study.

Figures 3-5 – POQ-SF Scores

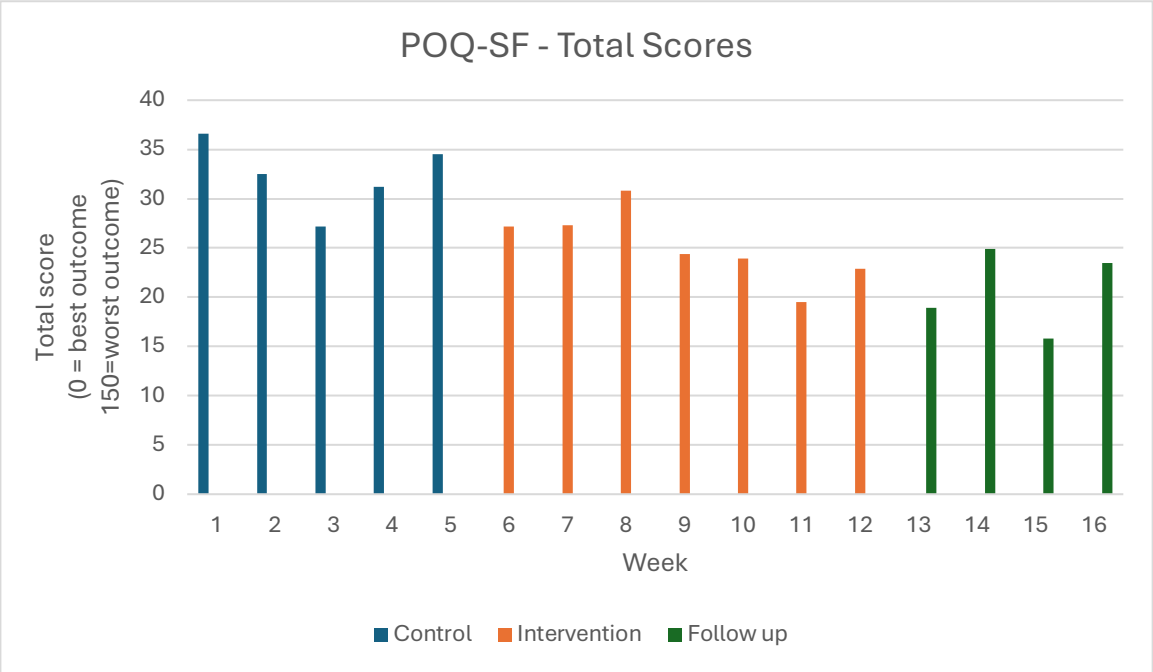

Figure 3: *The effect of the Jing Method on POQ-SF total scores*

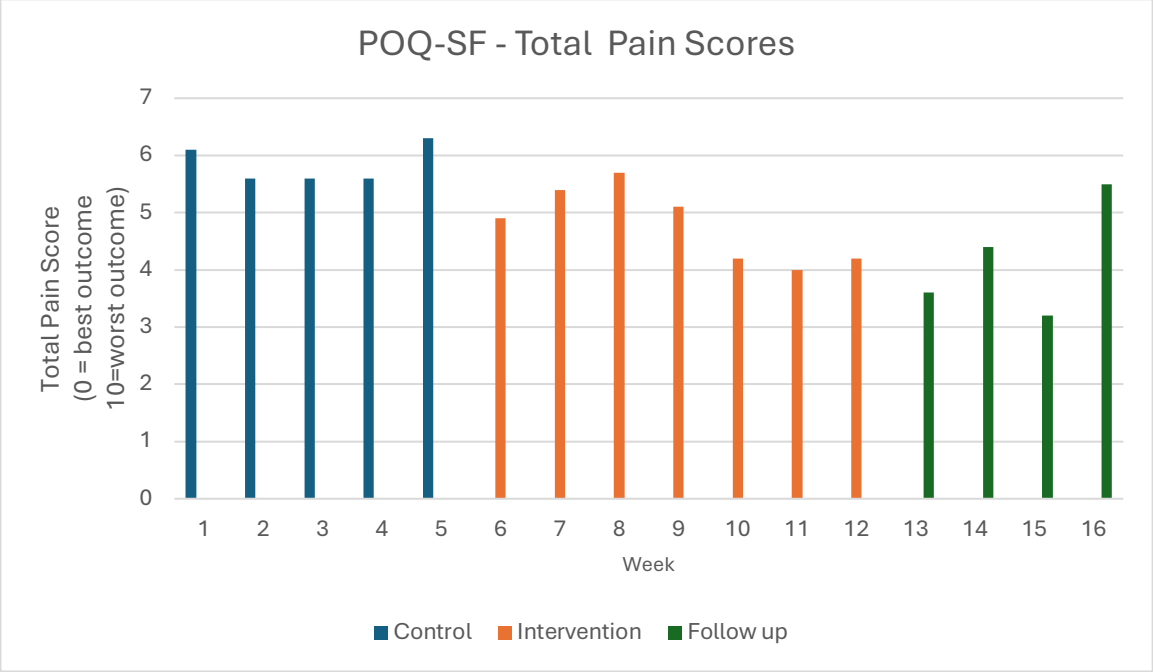

Figure 4: *The effect of the Jing Method on POQ-SF total pain outcome scores*

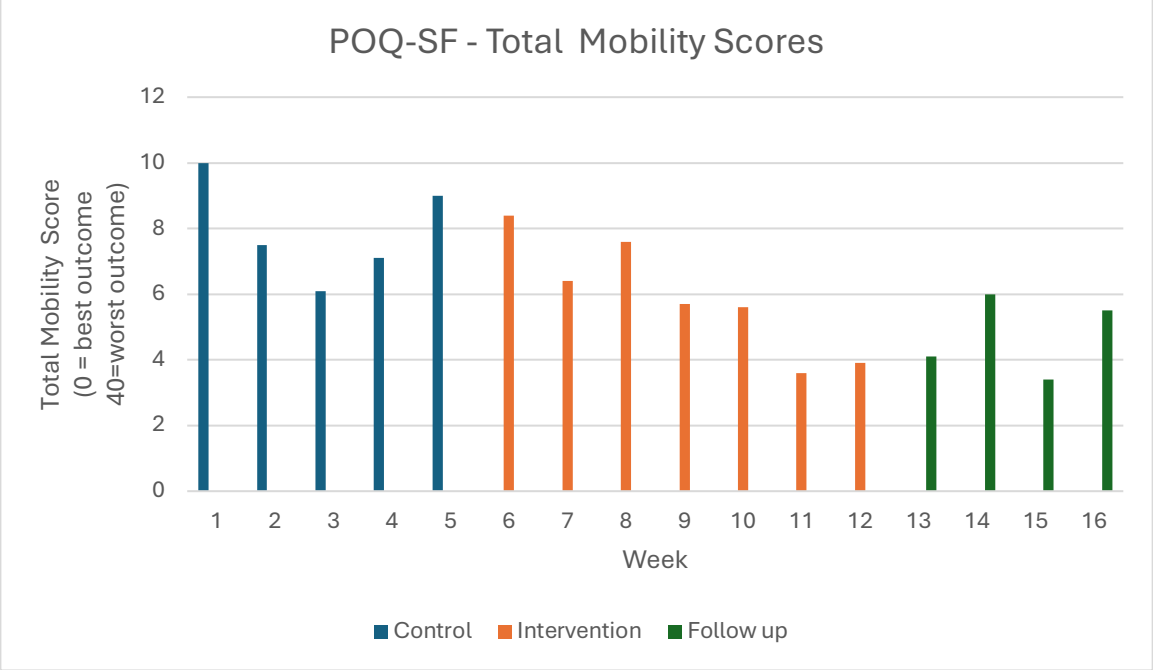

Figure 5: *The effect of the Jing Method on POQ-SF total mobility outcome scores*

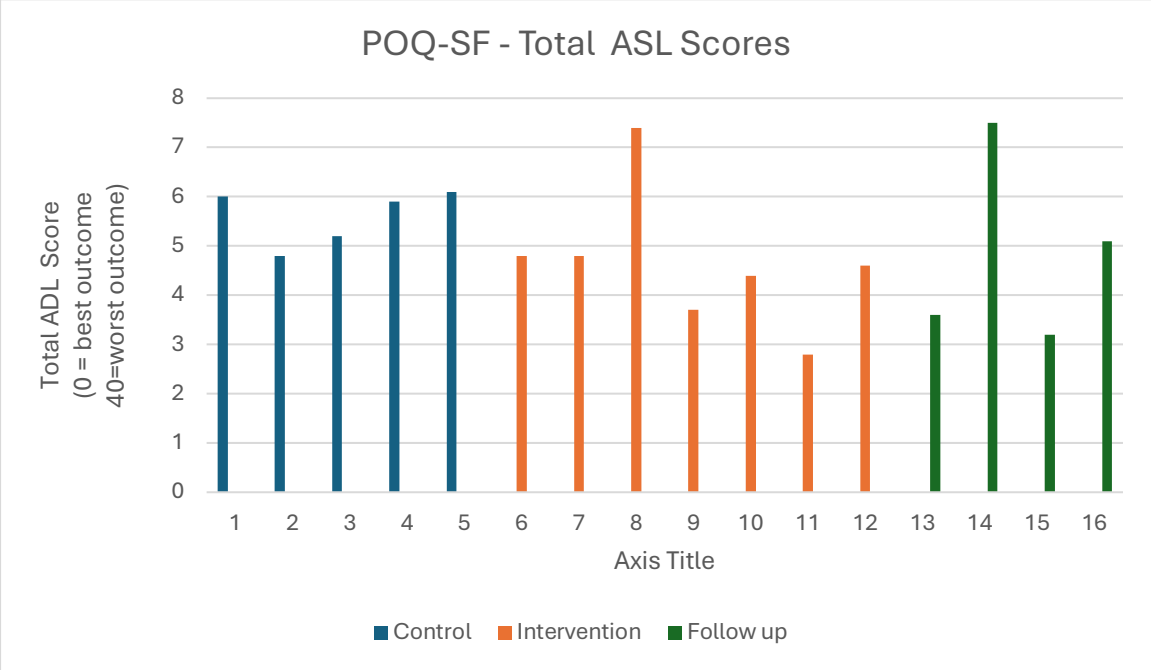

Figure 6: *The effect of the Jing Method on POQ-SF total activities of daily living scores*

Figure 7 – EHP-30 Scores

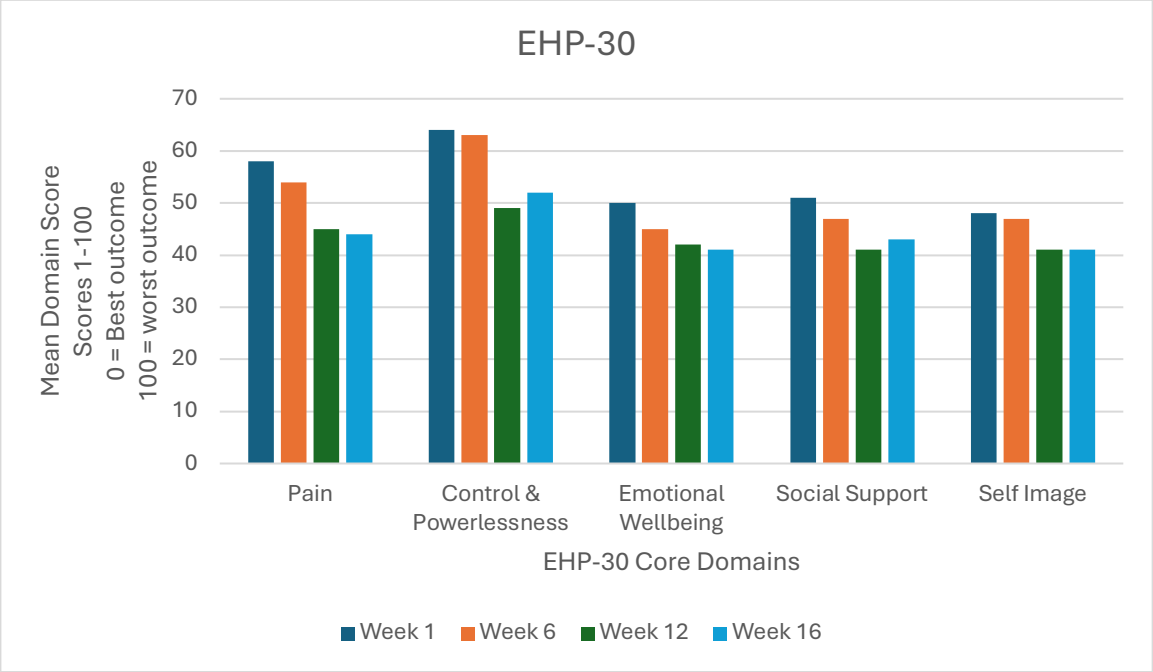

Figure 7: *The effect of the Jing Method on EHP-30 scores*

Figure 8-10 – BSGE Scores

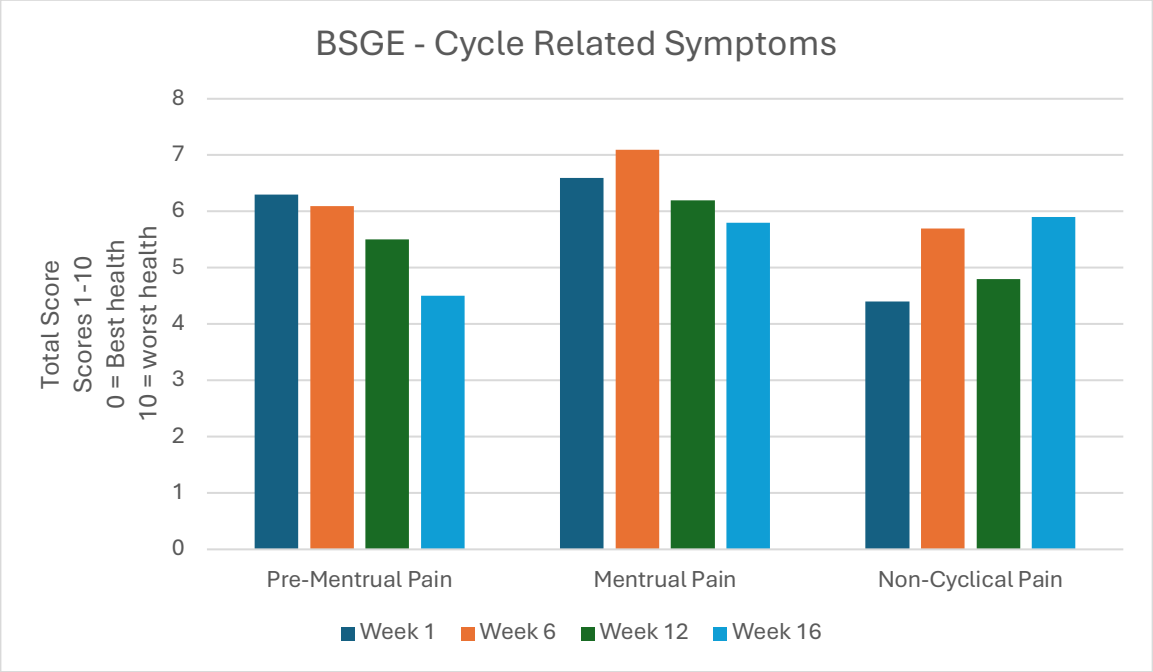

Figure 8: *The effect of the Jing Method on pain symptoms*

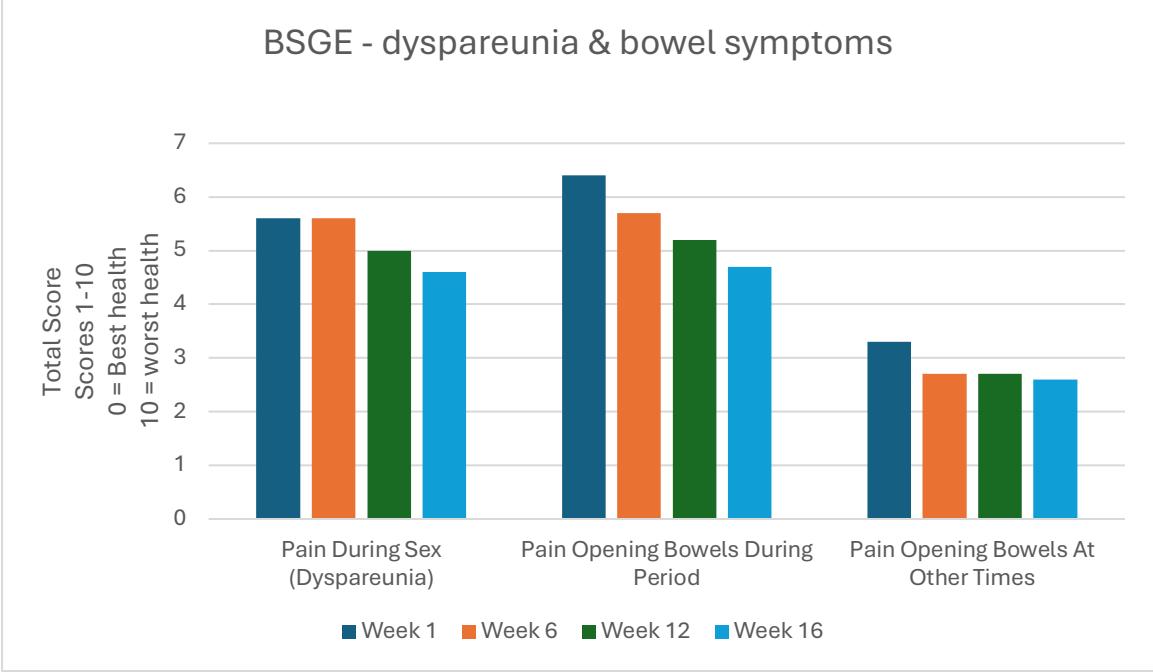

Figure 9: *The effect of the Jing Method on dyspareunia and bowel symptoms*

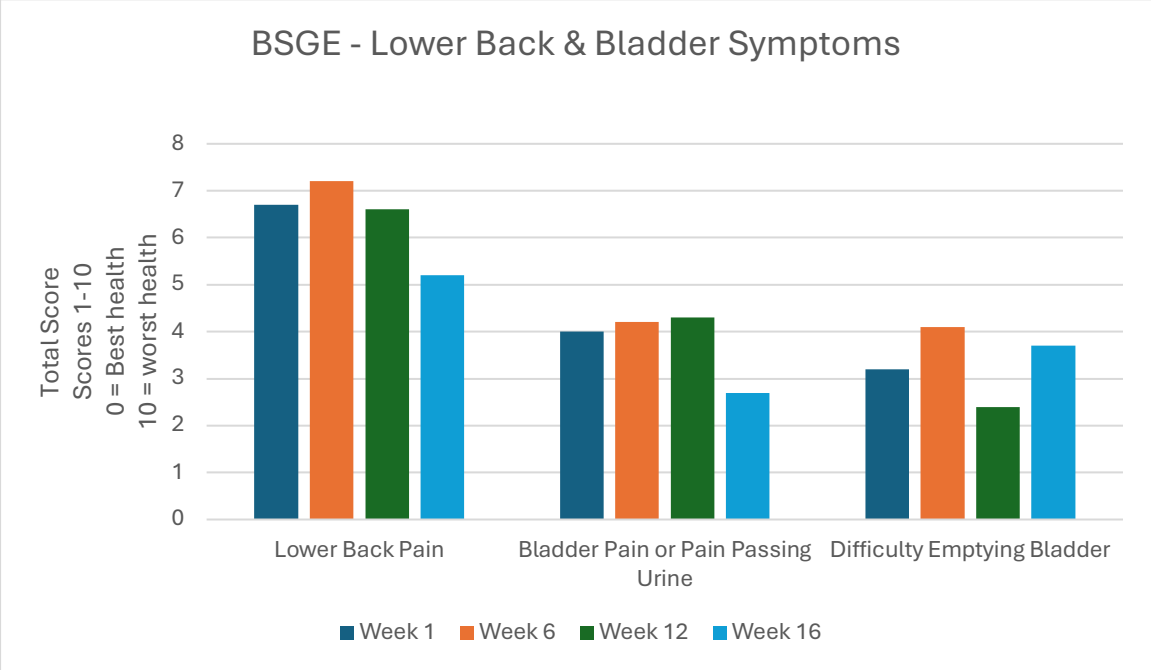

Figure 10: *The effect of the Jing Method on lower back and bladder symptoms*

DISCUSSION

The results of this 16-week study support the hypothesis that The Jing Method of Advanced Clinical Massage Therapy using a multimodal intervention incorporating hands-on massage, guided self-care, and group online treatment sessions could positively impact pain and quality of life in women with endometriosis.

Across all outcomes measured in the Pain Outcome Questionnaire–Short Form (POQ-SF), Endometriosis Health Profile–30 (EHP-30), and British Society for Gynaecological Endoscopy (BSGE) Pelvic Pain Questionnaire, participants demonstrated improvements in pain intensity, functional capacity, emotional wellbeing, and broader quality-of-life domains. Notably, many of these improvements were maintained beyond the intervention phase, suggesting potential longer-term benefits of the intervention.

The findings align with a growing body of evidence supporting integrative, biopsychosocial approaches in the management of endometriosis-related pain, particularly in areas that may not be adequately addressed through conventional medical management alone. Endometriosis is widely recognised as a complex, multifactorial condition in which pain severity does not always correlate with disease extent, and where biopsychosocial factors influence symptom experience. The positive outcomes observed in this study support previous research indicating that manual therapy, education, and self-management strategies may offer meaningful benefits for women living with this condition (Cleverley, 2025; Toprak et al., 2023; Valiani et al., 2010).

POQ-SF

Pain outcomes were assessed weekly throughout the 16-week study using the POQ-SF, allowing for detailed observation of changes over time. Reductions were observed in total POQ-SF scores following the intervention, indicating an overall improvement in pain-related outcomes. The mean total score of the control phase in comparison to the intervention phase saw an improvement of 16%, with a further 17% improvement in the follow-up phase, totalling a 33% improvement from the control phase to the follow-up phase, showing there were lasting effects from the intervention phase.

These findings support existing literature demonstrating the effectiveness of manual and physical therapies, including massage therapy, myofascial release, acupressure, stretching, and breathwork, in reducing pelvic and musculoskeletal pain associated with dysmenorrhoea and endometriosis (Cleverley ACMT, 2025; Mazur-Bialy et al., 2024; Valiani et al., 2010), emphasising the role complementary and alternative treatment can have on alleviating pain associated with myofascial dysfunction and adhesions (Gonçalves et al., 2017; Thiel et al., 2024; Zheng et al., 2019).

Notably, improvements were observed across the other domains of the POQ-SF, including pain intensity, mobility, ADL, vitality, NA, and fear-related avoidance behaviours. This is clinically significant, as endometriosis-related pain is multidimensional and often extends beyond nociceptive input alone. Chronic pain in endometriosis frequently affects physical functioning, energy levels, emotional wellbeing, and engagement in everyday activities, with fear-based avoidance behaviours further perpetuating disability and reduced quality of life (Maddern et al., 2020). The observed improvements in mobility and ADL are consistent with findings from previous research by Muñoz-Gómez et al., 2023 who found that manual therapy can increase lumbar mobility and pelvic pain, thus improving ADL.

It is worth noting throughout the study, fluctuations in pain scores, possibly coinciding with condition-related flare-ups. Given the cyclical nature of endometriosis, symptom variability across the menstrual cycle is expected. However, the extended six-week control phase enabled the establishment of individual baseline symptom patterns prior to intervention. The relatively stable scores observed during the control phase contrast with the consistent downward trend observed during the intervention and follow-up phases, suggesting that the improvements were unlikely to be attributable to natural symptom fluctuation alone. Despite individual variability, all but one participant demonstrated an overall downward trend in pain scores across the study duration.

EHP-30

The EHP-30 was completed at weeks 1, 6, 12, and 16, providing insight into changes in health-related quality of life across five core domains: pain, control and powerlessness (C&P), emotional wellbeing (EW), social support (SS), and self-image (SI). Results demonstrated improvements across all domains, suggesting that participants experienced meaningful improvement in HRQoL.

Pain scores on the EHP-30 showed a 22% improvement following the intervention phase at week 12, with a further 2% improvement observed at week 16, suggesting treatment can have longer lasting effects. These results are consistent with (Valiani et al., 2010) who showed a statistically significant decrease in pain intensity immediately after massage therapy, with a further reduction by week 6 following treatment.

The control and powerlessness domain saw similarly positive results of 23% improvement after the intervention phase, decreasing only to 19% at week 16. This suggests that participants felt more able to manage their symptoms and less overwhelmed by their condition with the treatment intervention received. Improvements in this area may reflect the emphasis placed on education, self-care, and active participation within the Jing Method framework. Empowerment and perceived control are key components of effective chronic illness management and associated with better long-term outcomes (Cetera et al., 2024; Cox et al., 2003; Desroches, 2024).

Improvements in emotional wellbeing, self-image, and social support were more modest but nevertheless encouraging. Endometriosis has been shown to significantly impact on body image, confidence, intimate relationships, and social participation (De Graaff et al., 2013). Della Corte et al., 2020 highlighted the burden endometriosis can have on body image, confidence, sexual relationship and social participation. While these domains may require a longer-term intervention to show substantial change, the trends observed in this study are encouraging and warrant further exploration into the role of adopting the BSP framework, and fostering a strong TA in the treatment of chronic pain and disease as emphasised by (Søndenå et al., 2020).

Interestingly, improvements across several EHP-30 domains were observed during the control phase, prior to the commencement of hands-on treatment. This suggests that psychosocial support alone, including initial consultation, regular contact, and validation of participants' experiences may have a positive impact HRQoL. This finding highlights the importance of therapeutic alliance in the treatment of endometriosis, particularly for individuals who may have experienced medical dismissal or trauma. Establishing a sense of safety, trust, and containment may itself contribute to improvements in wellbeing and symptom perception. This supports the results of Mikocka-Walus et al., 2025 who demonstrated an online supportive care

program was an effective implementation to improve HRQoL and biopsychosocial outcomes in women with endometriosis.

BSGE

The BSGE Pelvic Pain Questionnaire provided symptom-specific insights into changes in pelvic pain, dyspareunia, bowel symptoms, bladder pain, and lower back pain. Improvements were observed across all symptom categories with the exception of non-cyclical pelvic pain, which showed a marginal overall increase of 3.9% between pre- and post-intervention measurements. This appeared to be influenced by individual fluctuations. Two participants reported increased pain at week 12 followed by improvement at week 16, while two others showed the opposite pattern. Despite these variations, six participants reported an overall reduction in non-cyclical pelvic pain across the study. Given the fluctuating and unpredictable nature of endometriosis symptoms, it is plausible that these changes reflect natural symptom variability rather than a direct effect of the intervention.

Pre-menstrual pain saw the biggest improvement of 19.4% across the study, followed by bowel function improving by 15.7%, back pain by 15.7%, bladder function by 15.4%, dyspareunia by 14.3%, and menstrual pain improving by 13%. Improvements in pelvic pain, bladder and bowel dysfunction further support the results of Cleverley, 2025; Grinbergs, 2020; Hyde, 2021, adding validity to the methodology of the Jing method and it's multimodal approach.

Adhesions are thought to contribute to chronic pelvic pain, visceral dysfunction, and pelvic floor disorders through mechanisms such as neurogenic inflammation, altered biomechanics, and somatic referral of pain (Gruber & Mechsner, 2021). The improvements observed in

bowel, bladder, and back pain support previous findings by Mukhoirotin et al., 2020 suggesting that massage not only reduced menstrual pain but also stimulated the release β-endorphin levels and reduce pro-inflammatory cytokines, and Wurn et al., 2011 who demonstrated positive results with manual therapy attributed to detaching cross-links that form at sites of endometrial adhesions.

Massage, Manual Therapy and a Multi-modal Approach

Pelvic pain is one of the most common symptoms reported by women with endometriosis, often persisting after conventional medical treatment (Mettler et al., 2014). The results of this study showed improvements observed across all outcome measures, suggesting that the Jing Method's multimodal approach may offer meaningful benefits beyond short-term symptom relief.

One potential mechanism underlying pain reduction is the effect of myofascial release and soft tissue techniques on tissue mobility, muscle tone, and nervous system regulation. Chronic pelvic pain has been associated with fascial restrictions, trigger points, and pelvic floor hypertonicity, all of which may perpetuate nociceptive input and contribute to central sensitisation (Schleip, 2003). In a study by (Sert et al., 2025) structured myofascial release was shown to significantly reduce muscle tone and abdominal tension, with effects lasting up to 4 weeks beyond the immediate treatment period. Additionally, stimulation of mechanoreceptors within fascial tissues may influence autonomic nervous system activity. Reduced sympathetic activity may improve local circulation, enhance oxygen delivery to tissues, and reduce inflammatory processes, contributing indirectly to pain reduction (Aredo et al., 2017). The incorporation of heat, therapeutic touch, breathwork, and grounding techniques within the Jing

Method may further support nervous system regulation and stress reduction (Mulgund et al., 2015).

Chronic pain conditions such as endometriosis are associated with dysregulation of the autonomic nervous system, often characterised by heightened sympathetic activity. As highlighted in the book Massage Fusion: The Jing Method for the Treatment of Chronic Pain (Fairweather & Mari, 2015), by supporting nervous system regulation, massage therapy may indirectly reduce pain sensitivity and improve pain tolerance.

Chronic pelvic pain is strongly associated with anxiety, depression, frustration, and feelings of powerlessness (Szypłowska et al., 2023). The multimodal approach of the Jing Method integrating the biopsychosocial model may contribute to improvements in emotional wellbeing alongside physical symptom relief. The therapeutic alliance characterised by validation, attentive listening, and consistent support may have played a central role in improving emotional outcomes.

Group online sessions may also have contributed to enhanced emotional wellbeing by reducing isolation and normalising shared experiences. Endometriosis is often described as an invisible illness, and many women report feeling misunderstood or unsupported by others. Group participation may foster social connection, emotional resilience, and a sense of shared understanding. These findings align with previous research supporting the use of online and group-based interventions as effective complements or alternatives to in-person treatment.(Armour et al., 2019; Hyde Jenny, 2021; Mikocka-Walus et al., 2025; Percival, 2020).

With the reduction of pain and psychological distress, an improvement was seen in HRQoL for the women in this study. It is evident that The Jing Method, incorporating a person-centred multimodal approach, of massage, manual therapy, education and achievable self-care practices

can help women with endometriosis reconceptualise pain as manageable rather than threatening, thereby increasing confidence in movement and reducing fear avoidance behaviours, empowering women in understanding and taking control of their condition. This study adds the previous body of research on how massage and manual therapy has the potential to offer effective relief in symptoms for women with endometriosis (Agarwal et al., 2019; Cleverley ACMT, 2025; Muñoz-Gómez et al., 2023; Valiani et al., 2010; Wurn et al., 2011).

Limitations

The within-subject design allowed participants to act as their own controls, and the extended baseline period helped account for individual variability in symptom presentation. The use of multiple validated outcome measures enabled a comprehensive assessment of pain, function, and quality of life. However, several limitations should be acknowledged. The small sample size limits the statistical strength of the findings and increases susceptibility to variation. The absence of a separate control group means that placebo effects or external influences cannot be fully excluded. Self-reported outcome measures are also subject to response bias, and participants may have been motivated to report improvements due to their engagement with the researcher. Adherence to self-care practices varied between participants and was not formally controlled for within the analysis.

Participants continued to use pain medication as required throughout the study, which may have influenced pain outcomes. Future research would benefit from tracking medication use alongside pain scores to better understand its potential impact.

Further research using larger sample sizes, controlled study designs, longer follow-up periods, and qualitative methodologies is recommended to strengthen the evidence base and clarify the

mechanisms underlying the observed improvements. Expanding research through collaboration with other clinical massage therapists would increase sample size, diversify the participant cohort, and extend the study across a wider range of clinical settings, thereby strengthening the validity of the findings. With funding secured by Cleverly (2025) from the RUH Gynaecology Educational Fund, there is potential to obtain further investment for larger-scale studies. Partnering with mainstream clinical gynaecology departments could also support better integration of complementary and conventional medicine, improving outcomes for endometriosis.

CONCLUSION

The findings of this study suggests that the Jing Method of Advanced Clinical Massage may be a valuable adjunctive approach for women with endometriosis, particularly for those seeking nonpharmacological options to manage pain and improve quality of life. The emphasis on empowerment, education, and self-management aligns with current recommendations for chronic pain care (Becker et al., 2022).

These results contribute to the emerging evidence base supporting integrative person-centred approaches to endometriosis care and highlights the potential role of advanced clinical massage therapy alongside a BSP framework in addressing the complex and multifaceted nature of endometriosis related pain and quality of life.

Whilst these results are positive, the small sample size makes it difficult to draw a definitive conclusion to rule out the possibility that these outcomes are by chance or individual variables. Expanding the study to a larger sample size, with a more diverse cohort would further validate these findings and enhance their applicability to broader clinical settings.

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APPENDICES

Appendix 1 – Ethics Form

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

Jing BTEC Research Ethics Form

BTEC Level 6: Professional diploma in Advanced Clinical and Sports Massage

Section 1: to be completed by student

Student's name:	CHLOE CASH
Student number:	ND57667
BTEC Year-group:	2024-26
Date of application:	8/05/2025
Student e-mail address:	INFO@LIFEFITCORNWALL.CO.UK
Title of research project:	Evaluating the Jing Method of Advanced Clinical Massage on Pain and Quality of Life in Women with Endometriosis

Section 2: Does your project involve any primary research using human subjects?

Please indicate as appropriate.

	YES	NO
Does your project involve any primary research using human subjects?		NO
If yes, does it involve children under 16?		NO
If yes, does it involve children under 18?		NO
Other vulnerable populations (i.e. mental illness, aged subjects)?		NO
Does your project involve NHS patients, NHS staff or Local Authority Service Providers?		NO
Are you planning to use deception?		NO

Are you collecting sensitive personal data such as sexuality, mental health data, etc.?		NO
Does your study involve paying participants or an alternative incentive to participate		NO
Could the study put you or someone else at risk of injury?		NO
Does your project make use of a validated questionnaire?	YES	
If yes, please specify the name of the validated questionnaire you are using and attach a copy here. • EHP-30 – Endometriosis Health Profile 30 Questions • POQ-SF - Pain Outcome Questionnaire short form • BSGE – Pelvic Health Questionnaire (NHS Patient intake form)		

Section 3: Research premises

Where is your research being undertaken? Two locations: My Clinic: Life Fit Cornwall Suite 3 Tower House New Portreath Road TR16 4QL Online appointments with participants in their own environment.	
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.	Not applicable

Section 4: Recruitment

How will you recruit subjects for this research study?

I will recruit participants in my locality who are able to travel to my clinic location.

- Advertisement on my Facebook business page and groups (Holistic Her: Business, Balance and Beyond; Cornish Gossip Girls; Cornwall Mums; Cornwall Mums Business; Endometriosis Support & Awareness UK; Endometriosis & Pelvic Pain Support Group Devon & Cornwall)
- Posters and flyers in my workplace
- Email to existing and past client list
- Contact other local health and wellness practitioners in the local area working with women (menopause specialists, yoga and Pilates teachers, Slimming World)
- Posters and flyers in local GP surgeries and gynaecological department at the hospital (if permission is granted after making contact)

Section 5 Outline your project procedure

This is effectively a draft of your method, include information on when questionnaires will be used, what your intervention will involve, any stimuli used, etc.

This study aims to evaluate the effect of The Jing Method of Advanced Clinical Massage on Pain and Quality of Life in Women with Endometriosis.

Participants will be recruited to this within person design study using adverts via social media, emails to existing and past client list, posters and flyers in my workplace, email contact with other local health and wellness practitioners in the local area working with women, posters and flyers in local GP surgeries and gynecological department at the hospital (if permission is granted after making contact).

Upon responding and showing interest in my study recruitment advertising, participants will receive a participant letter, explaining the requirements and criteria in more detail, and copies of the questionnaires to review.

If potential participants wish to proceed, they will receive a 1:1 online consultation, to have the study explained to them fully, confirm they meet all required inclusion criteria, and ensure they have a full understanding of what the study entails and complete the consent form to give full consent to taking part in the study to be returned within 24 hours of initial online meeting.

A date and time will then be arranged for the hands-on treatments for the intervention phase.

Participants are required to inform the researcher of any medications, manual therapy or other relevant treatments they are receiving for their Endometriosis throughout the duration of the study.

Weeks 1-6 will form the control phase of the study to establish baseline measurements of health profile with regards to pain and quality of life.

- Week 1 the EHP-30, POQ-SF and BSGE will be completed.
- Weeks 2, 3 and 4 only the POQ-SF instrument.
- Week 6 the EHP-30, POQ-SF and BSGE will be completed.
- Questionnaires will be sent out on a Sunday morning, for completion within 24 hours.
- There will be no hands-on or treatment intervention during the control phase.

Weeks 7-12 will be the intervention phase.

- During this time participants will receive three 50-minute hands on treatments on week 7, 9, 11.
- The treatment will use elements of The Jing Method lower back, stress and chronic pain and advanced myofascial release protocols.
- Following the treatment, the participants will be given 3 self-care exercises making up a routine no longer than 10 minutes to complete 3 times a week in-between the treatment sessions. This will be supplemented by a follow along YouTube video of these exercises. The participants will be asked to inform the researcher each week how many times they completed it.
- A group online treatment will be given on week 8, 10, 12 using self-massage and acupressure, meditation and breath work, and exercise and stretching.
- The POQ-SF will be completed each week during the intervention phase and participants will also inform the researcher how many times they performed the self-care. It will be sent out 6 days after treatment to be returned within 24 hours or prior to next session.
- The EHP-30 and BSGE completed 6 days after the final treatment. Questionnaires will be sent at 9am on a Sunday morning to be completed within 24 hours.
- Details of each weekly treatment plus self-care routine will be added as an appendix to the study.

Week 13 -16 is the follow-up phase.

- On weeks 13-15 the POQ-SF will be completed, and on the final week 16, the POQ-SF, EHP-30 and the BSGE Pelvic Pain Questionnaire will be completed to assess longer-term effects post-treatment. These will be sent at 9am on a Sunday morning, to be completed within 24 hours.

After the study, a feedback form will be sent to all participants, for evaluation of the study and the experience of participants which may help improve further research studies that will take place.

Section 6: Describe what your participants need to do

- Upon responding and showing interest in my study recruitment advertising, participants will receive a participant letter, explaining the requirements and criteria in more detail.
- If potential participants wish to proceed, they will receive a 1:1 online consultation, to have the study explained to them fully and confirm they meet all required inclusion criteria.
- Participants are required to provide information for the consultation process and complete the consent form to give full consent to the study.
- Participants are required to inform the researcher of any medications, manual therapy or other relevant treatments they are receiving for their Endometriosis throughout the duration of the study.
- Participants will agree to a set day and time to visit for the intervention phase.
- Weeks 1-6, Participants are required to fill in the POQ-SF questionnaire once a week for 6 weeks, and the EHP-30 and BSGE Pelvic Pain Questionnaires on week 1 and 6, with no intervention.
- Weeks 7-12, participants will receive three standardised 50-minute hands on Jing clinical massage treatments on week 7, 9, 11.
- The treatment will use elements of The Jing Method lower back, stress and chronic pain and advanced myofascial release protocols,
- Participants will perform 3 self-care exercises making up a routine of no longer than 10 minutes to complete 3 times a week in-between treatments, with a follow-along video sent to them within 24 hours of their treatment.
- Three group online treatments on week 8,10, 12 using self-massage, acupressure, meditation, breath work, prescription exercise and stretching.
- The POQ-SF will be completed each week. It will also ask participants how many times they completed the self-care.
- The EHP-30 and BSGE completed after the final treatment.
- Questionnaires will be sent at 9am on a Sunday morning to be completed within 24 hours.

At week 16, 4 weeks post-treatment, the POQ-SF, EHP-30 and the BSGE Pelvic Pain Questionnaire will be sent to participants to assess longer-term effects post-treatment. After the study, a feedback form will be sent to all participants, for evaluation of the study and the experience of participants which may help improve further research studies that will take place.

Section 7: Respecting confidentiality and ethical issues for participants

How will you manage participant confidentiality? Ensure that the information refers to GDPR and is compliant with this legislation. What ethical considerations are there?

- Data held will be in accordance with the General Data Protection Regulation (GDPR)
- Information on initial signup form informing participants that their information will not be available to third parties.
- Assurance that details will not be seen by anyone else.
- Participants names will be replaced by numbers so they will be anonymous.
- As soon as the study is over, all details will be deleted.
- For online sessions, participants can change their names so real identity is not revealed.
- Participants will agree not to record any of the online sessions to protect the identity of others.
- There is minimal risk, however it is possible that participants feel tenderness or sensitivity following a treatment. This will be explained in the sign-up information before consenting to the study, and if this occurs it will be monitored. I hold up to date insurance, and a premises risk assessment.
- It is possible that trauma, mental and emotional health issues are present or may occur at any time. As with my everyday practice I will monitor for this occurrence and adopt safeguarding procedures when needed. These include: Treating participants with sensitivity at all times; remaining vigilant to signs of emotional and mental distress; Green Cross coding when required; Stopping the treatment if necessary; Signposting participants to other professionals.
- This study will be evaluating pain measured against quality of life. Should the researcher be concerned about a participant, resources will be available of local specialist help where participants can be signposted to.
- Participants can withdraw from the study at any time without explanation or consequences.
- I am a fully qualified massage therapist.

Section 8: Inclusion and exclusion criteria

What sort of people will the subjects be?
The study will include:

- Women over 18 with a confirmed diagnosis of endometriosis via laparoscopy or advanced imaging AND pain/symptoms affecting quality of life
- Available for all 16 weeks attending all hands on and online appointments (pre study assessment, control phase, treatment, follow up, and feedback)
- Able to complete the questionnaires as required
- Available to attend an online 1:1 consultation with the researcher ahead of the intervention phase
- Able to attend the clinic for 3 hands on treatments

- Able to refrain from any other massage or bodywork for the duration of the study
- Able to continue normal routine, with no plans of significant lifestyle changes
- No plans to change medication or treatment during the study

The study will exclude:

- If individuals have had surgery within 3 months or pregnant
- Planned change in medication during research phase: if this will affect the validation of the baseline.
- Further planned medical intervention, including surgery and fertility treatment during the research project.
- Any ongoing medical diagnosis other than endometriosis, or medication which may affect study; for example, cancer treatments such as chemotherapy.

Section 9: Student declaration:

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.	YES	

Student's handwritten signature:

_____

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

Print Name: **Date:**

ONCE YOU HAVE COMPLETED THE ABOVE ETHICS DETAILS, THEN YOU CAN PROCEED TO PARTICIPANT INFORMATION AND CONSENT FORMS, SO READ BELOW AS IT IS IMPORTANT TO BE CLEAR ABOUT WHAT YOUR PARTICIPANTS NEED TO DO.

Informed consent must be obtained for **all** participants before they take part in your project. The Consent Form 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 should not involve participants under 18 without express permission from your supervisor. 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.

Jing's assessment (to be signed by Jing after ethics and participant information details completed)

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	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	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	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	I am confident the participants' confidentiality will be preserved.
YES	I consider that any risks involved to the student, the participants, and any third party are minimal.
YES	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: .....Susan Harrison..... date: .....29/7/25.....

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.

Appendix 2: ENDOMETRIOSIS HEALTH PROFILE QUESTIONNAIRE (EHP-30)

PART 1: CORE QUESTIONNAIRE

DURING THE LAST 4 WEEKS, HOW OFTEN, BECAUSE OF YOUR ENDOMETRIOSIS, HAVE YOU..... (Mark only one answer per question)

	Never	Rarely	Sometimes	Often	Always
1. Been unable to go to social events because of your pain?	☐	☐	☐	☐	☐
2. Been unable to do jobs around the house because of your pain?	☐	☐	☐	☐	☐
3. Found it difficult to stand because of your pain?	☐	☐	☐	☐	☐
4. Found it difficult to sit because of your pain?	☐	☐	☐	☐	☐
5. Found it difficult to walk because of your pain?	☐	☐	☐	☐	☐
6. Found it difficult to exercise or do the leisure activities that you would like to?	☐	☐	☐	☐	☐
7. Lost your appetite and/or been unable to eat because of your pain?	☐	☐	☐	☐	☐

THE LAST 4 WEEKS, HOW OFTEN, BECAUSE OF YOUR ENDOMETRIOSIS, HAVE YOU.... (Mark only one answer per question)

		Never	Rarely	Sometimes	Often	Always
8.	Been unable to sleep properly because of your pain?	☐	☐	☐	☐	☐
9.	Had to go to bed/lie down because of your pain?	☐	☐	☐	☐	☐
10.	Been unable to do the things that you want to because of your pain?	☐	☐	☐	☐	☐
11.	Felt unable to cope with the pain?	☐	☐	☐	☐	☐
12.	Generally felt unwell?	☐	☐	☐	☐	☐
13.	Felt frustrated because your symptoms are not getting better?	☐	☐	☐	☐	☐
14.	Felt frustrated because you are not able to control your symptoms?	☐	☐	☐	☐	☐

THE LAST 4 WEEKS, HOW OFTEN, BECAUSE OF YOUR ENDOMETRIOSIS, HAVE YOU.... (Mark only one answer per question)

		Never	Rarely	Sometimes	Often	Always
15.	Felt unable to forget your symptoms?	☐	☐	☐	☐	☐
16.	Felt as though your symptoms are ruling your life?	☐	☐	☐	☐	☐
17.	Felt your symptoms are taking away your life?	☐	☐	☐	☐	☐
18.	Felt depressed?	☐	☐	☐	☐	☐
19.	Felt weepy/tearful?	☐	☐	☐	☐	☐
20.	Felt miserable?	☐	☐	☐	☐	☐
21.	Had mood swings?	☐	☐	☐	☐	☐
22.	Felt bad tempered or short tempered?	☐	☐	☐	☐	☐

THE LAST 4 WEEKS, HOW OFTEN, BECAUSE OF YOUR ENDOMETRIOSIS, HAVE YOU.... (Mark only one answer per question)

		Never	Rarely	Sometimes	Often	Always
23.	Felt violent or aggressive?	☐	☐	☐	☐	☐
24.	Felt unable to tell people how you feel?	☐	☐	☐	☐	☐
25.	Felt others do not understand what you are going through?	☐	☐	☐	☐	☐
26.	Felt as though others think you are moaning?	☐	☐	☐	☐	☐
27.	Felt alone?	☐	☐	☐	☐	☐
28.	Felt frustrated as you cannot always wear the clothes you would choose?	☐	☐	☐	☐	☐
29.	Felt your appearance has been affected?	☐	☐	☐	☐	☐
30.	Lacked confidence?	☐	☐	☐	☐	☐

EHP-30 SCORING TEMPLATE

THE EHP-30 CONSISTS OF 30 CORE ITEMS DIVIDED INTO 5 DOMAINS:

1. Pain
2. Control and powerlessness
3. Emotional well-being
4. Social support
5. Self-image

EACH ITEM IS ANSWERED ON A 5-POINT LIKERT SCALE:

- 0 = Never
- 1 = Rarely
- 2 = Sometimes
- 3 = Often
- 4 = Always

REVERSE CODING

- The EHP-30 does not require reverse coding, as higher scores reflect a worse quality of life.

CALCULATE THE RAW SCORE FOR EACH DOMAIN

- Add up the scores for all items within a domain.

NORMALIZE SCORES TO A 0–100 SCALE

- To make scores comparable across domains, transform the raw scores into a scale from 0 to 100:
- Normalised score = (Raw score – Minimum possible Score/Maximum possible score – Minimum possible score) x 100

WHERE:

- Raw Score = Sum of item responses in a domain
- Minimum Possible Score = 0 (if all responses in the domain are "Never")
- Maximum Possible Score = (Number of items in the domain) × 4 (if all responses are "Always")

INTERPRETATION

- Higher scores indicate greater impairment in health-related quality of life.
- Comparisons can be made between domains or across different time points for the same individual.

NOTES

• Ensure all items are completed; missing data can affect accuracy.
• Incomplete data can be handled with imputation methods or prorated scores if allowed by study guidelines.

Appendix 3: PAIN OUTCOMES QUESTIONNAIRE SHORT FORM (POQ-SF)

INSTRUCTIONS: Please circle the number that best describes the question being asked. Choose only one number per question.

1)	Enter today's date:	_____ / _____ / _____ (dd/mm/yyyy)										
2)	On a scale of 0 to 10, with 0 being no pain at all and 10 being the worst possible pain, how would you rate your pain on average during the past week?											
←												→
No Pain	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Pain

3)	Does your pain interfere with your ability to walk?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

4)	Does your pain interfere with your ability to carry/handle everyday objects such as a bag of groceries or books?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

5)	Does your pain interfere with your ability to climb stairs?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

6)	Does your pain require you to use a cane, walker, wheelchair, or other devices?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

7)	Does your pain interfere with your ability to bathe yourself?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

8)	Does your pain interfere with your ability to dress yourself?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

9)	Does your pain interfere with your ability to use the bathroom?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

10)	Does your pain interfere with your ability to manage your personal grooming (for example, combing your hair, brushing your teeth, etc.)?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

11)	Does your pain affect your self-esteem or self-worth?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

12)	How would you rate your physical activity?											
←												→
Significant limitation in basic activities	0	1	2	3	4	5	6	7	8	9	10	Can perform vigorous activities without limitation

13)	How would you rate your overall energy?											
←												→
Totally worn out	0	1	2	3	4	5	6	7	8	9	10	Most energy ever

14)	How would you rate your strength and endurance today?											
←												→
Very poor	0	1	2	3	4	5	6	7	8	9	10	Very high

15)	How would you rate your feelings of depression today?											
←												→
Not at all depressed	0	1	2	3	4	5	6	7	8	9	10	Extremely depressed

16)	How would you rate your feelings of anxiety today?											
←												→
Not at all anxious	0	1	2	3	4	5	6	7	8	9	10	Extremely anxious

17)	How much do you worry about re-injuring yourself if you are more active?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

18)	How safe do you think it is for you to exercise?											
←												→
Not safe at all	0	1	2	3	4	5	6	7	8	9	10	Extremely safe

19)	Do you have problems concentrating on things today?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

20)	How often do you feel tense?											
←												→
Not at all	0	1	2	3	4	5	6	7	8	9	10	All the time

PAIN: Self-report of pain intensity	☐ Item 2										
Mobility: Self-report of pain related impairment in mobility	☐ Item 3	+	☐ Item 4	+	☐ Item 5	+	☐ Item 6	+		=	☐ Total
Activities of daily living activities (ADL): Self-report of pain related impairment in completing ADLs	☐ Item 7	+	☐ Item 8	+	☐ Item 9	+	☐ Item 10			=	☐ Total

Vitality: Subjective sense of impairment in activity and energy levels	30	-	☐ (Item 12	+	☐ Item 13	+	☐ Item 14)	+		=	☐ Total
Negative affect (NA): Self-report of dysphoric affect and associated symptoms	☐ Item 11	+	☐ Item 15	+	☐ Item 16	+	☐ Item 19	+	☐ Item 20	=	☐ Total
Fear: Subjective sense of impairment in activity and energy levels	(10	-	☐ Item 18)	+	☐ Item 17					=	☐ Total
Total Score: Sum of the five subscale scores											☐ **Total Score**

PAIN OUTCOMES QUESTIONNAIRE SCORING TEMPLATE

POQ: Intake Inpatient Data (N=466)

%ile	Pain	ADL	Mobility	Vitality	NA	Fear	Total
1	3	0	0	8	1	0	31
10	5	0	12	14	11	4	60
25	6	1	19	18	19	10	77
50	7	8	28	22	29	12	97
75	8	18	35	25	37	16	121
90	9	28	40	28	44	18	138
99	10	40	40	30	50	20	170

POQ: Intake Outpatient Data (N=240)

%ile	Pain	ADL	Mobility	Vitality	NA	Fear	Total
1	2	0	0	2	1	0	2
10	5	0	12	14	8	5	51
25	6	1	18	17	15	10	71
50	7	7	25	21	27	13	97
75	8	21	35	24	36	17	120
90	9	29	39	28	42	19	145
99	10	40	40	30	50	20	173

Appendix 4: BSGE PELVIC PAIN QUESTIONNAIRE

BACKGROUND DETAILS

Smoking:	Current Smoker ☐	Ex Smoker ☐	Never smoked ☐
What is your height?	_____	Metres	
What is your current weight?	_____	Kilograms	

1. GENERAL QUESTION ABOUT YOUR PAIN

Over the course of your current normal menstrual cycle, which of the following symptoms do you experience? Please tick yes or no to show whether you experience symptom during a normal cycle, and then if you have experienced the symptom, circle a score from 1 to 10 to indicate how slight or severe it usually is. (NOTE: N/A denotes 'no period')

Pre-menstrual pain (pain before periods)	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Menstrual pain (pain during periods)	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Non-cyclical pelvic pain (pain throughout the month)	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Pain during sexual intercourse	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Pain opening bowels during period	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Pain opening bowels at other times	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Lower back pain	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Do you have difficulty emptying your bladder	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

Bladder pain or pain passing urine	Experienced YES ☐ NO ☐ N/A ☐
Experienced slightly 1 2 3 4 5 6 7 8 9 10 Experienced severely	

2. INFORMATION ABOUT BOWEL FUNCTION
(NOTE: N/A is to be used if you have a stoma)

Do you have frequent bowel movements?

Never ☐ a little of the time ☐ some of the time ☐ most of the time ☐ all of the time ☐ N/A ☐

Do you have urgent bowel movements?

Never ☐ a little of the time ☐ some of the time ☐ most of the time ☐ all of the time ☐ N/A ☐

Do you have sensation on incomplete emptying of the bowel?

Never ☐ a little of the time ☐ some of the time ☐ most of the time ☐ all of the time ☐ N/A ☐

Do you have constipation?

Never ☐ a little of the time ☐ some of the time ☐ most of the time ☐ all of the time ☐ N/A ☐

Have you been troubled by blood in the stool around the same time as your period?

Never ☐ a little of the time ☐ some of the time ☐ most of the time ☐ all of the time ☐
Not applicable as I don't have periods ☐

3. MEDICAL THERAPY

Are you currently taking any of the following treatments?
Please tick to indicate your use.

Oral contraceptive pill	**YES** ☐	**NO** ☐
Mirena IUS (hormone containing coil)	**YES** ☐	**NO** ☐
GnRH Analouges E.g. Goserelin, Buserelin, Lupron, Naferelin	**YES** ☐	**NO** ☐
GnRH Analouges + oestrogens (HRT)	**YES** ☐	**NO** ☐
Progestogens E.g. Primolut, Duphaston, Provera	**YES** ☐	**NO** ☐
Aromatase inhibitors	**YES** ☐	**NO** ☐
Hormone replacement	**YES** ☐	**NO** ☐

4. FERTILITY

Are you currently trying to get pregnant?	**YES** ☐	**NO** ☐
Yes, been trying for less than 18 months	**YES** ☐	**NO** ☐
Yes, been trying for more than 18 months	**YES** ☐	**NO** ☐
Are you currently pregnant?	**YES** ☐	**NO** ☐

5. DO YOU TAKE ANY OF THE FOLLOWING PAINKILLERS

Paracetamol	**YES** ☐	**NO** ☐
NSAID anti-inflammatories E.g. Ibuprofen, Diclofenac	**YES** ☐	**NO** ☐
Opiates E.g. Tramadol, DF118	**YES** ☐	**NO** ☐

6. HAVE YOU EVER HAD PREVIOUS SURGERY FOR ENDOMETRIOSIS

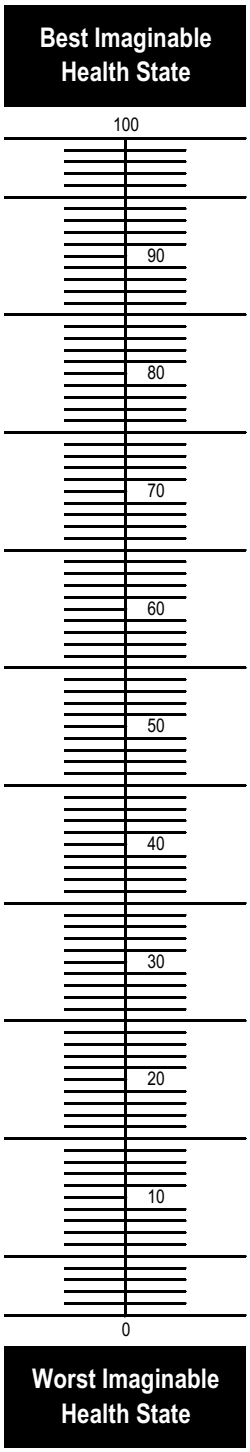
Have you had your endometriosis surgically treated before today?	**YES** ☐	**NO** ☐
Have you had an ovary removed?	**YES** ☐	**NO** ☐
Have you had both ovaries removed?	**YES** ☐	**NO** ☐
Have you had a hysterectomy?	**YES** ☐	**NO** ☐

7. QUESTIONS ABOUT YOUR HEALTH IN GENERAL

The following questions refer to how you feel about your health in general TODAY. They form part of a standard set of questions relating to quality of life and therefore some may not seem particularly relevant to you. However, please try to answer **ALL** questions.

Please score how good or bad your health is TODAY. The best health state you can imagine is marked 100 and the worst health state you can imagine is marked 0.

(Please place a line on the scale between 1 and 100 according to how you feel)


Best Imaginable Health State
100
90
80
70
60
50
40
30
20
10
0
Worst Imaginable Health State

8. PLEASE INDICATE WHICH STATEMENTS BEST DESCRIBE YOUR HEALTH STATE TODAY

Usual Activities (e.g. work, study, housework, family or leisure activities)

I have no problems with performing my usual activities	☐
I have some problems with performing my usual activities	☐
I am unable to perform my usual activities	☐

Pain/Discomfort

I have no pain or discomfort	☐
I have moderate pain or discomfort	☐
I have extreme pain or discomfort	☐

Anxiety/Depression

I am not anxious or depressed	☐
I am moderately anxious or depressed	☐
I am extremely anxious or depressed	☐

Mobility

I have no problems in walking about	☐
I have some problems in walking about	☐
I am confined to bed	☐

Self-Care

I have no problems with self-care	☐
I have some problems washing or dressing myself	☐
I am unable to wash or dress myself	☐

Thank you very much for completing this questionnaire.
We would like to reassure you again that all the answers will be treated in the strictest confidence.

Appendix 5: Hands On Treatment Protocol

PRONE

- Grounding
- Amma with hot stones – Erectors/bladder channel, glutes, posterior line to feet
- Hot stone placement on sacrum
- MFR – cross hand stretch over lower back
- MFR – double fist down erectors
- Broad effleurage including hot stones
- Strip and treat erectors
- Forearm effleurage – whole back
- Deep effleurage to QL with palm of hand – superior to inferior
- Illiac scissors
- Draped QL Stretch
- BL 31-34 (sacrum bone holes)
- Forearm work to glutes and lateral rotators
- Hip mobilisation
- STR to lateral hip rotators
- Amma down legs
- K1 and grounding

SUPINE

- Stone Placement along anterior chakra points
- Fascial leg pulls

- Cross hand stretch across hip flexors with leg dropped off table
- KI 3 – (medial malleolus/achilles)
- SP 6 – 3 yin junction
- MFR – Abdominal transverse fascial hold
- MFR – Sacral transverse fascial hold
- Effleurage to abdominals
- Static compressions with breath working medially to laterally along the diaphragm
- Working of the conception vessel
- MFR – cross hand stretch of the pecs
- Effleurage to neck and shoulders with hot stones
- Deep work to neck
- Fascial massage with hot stones
- GV 20 – Head
- Grounding and head hold

Appendix 6: Self-Care Week 1&2

LIFE FIT CORNWALL
SPORTS INJURY + MASSAGE THERAPY

Tel: 07478650676
e-mail: chloe@lifefitcornwall.co.uk

JING ADVANCED MASSAGE TRAINING

Jing Advanced Massage Training
www.jingmassage.com
01273 628942

SELF CARE PLAN

BTEC Research Study Treatment Phase Week 1-2
Date 12th October 2025

This follow along video guides you through a mini self care class, enhancing the benefits of the exercises - https://youtu.be/H3stMy88FuQ?si=V1uVkkTuNoI92d7S

SELF CARE TRACKER

13th October 2025 **20th October 2025**

M	T	W	T	F	S	S	M	T	W	T	F	S	S

You will need:

- **3 pillows**
- **A rolled-up towel**
- **A hot water bottle**

Cat Cow Stretch

1. Starting position:
Begin on your hands and knees, with your hands directly under your shoulders and your knees under your hips.
2. Cow pose (exhale):
As you exhale, let your belly drop toward the floor, arch your back, and lift your head to look forward or slightly up.
3. Cat pose (inhale):
As you inhale, round your spine toward the ceiling, tuck your tailbone, and draw your chin toward your chest.
4. Repeat:
Flow back and forth between these two positions for **8-12 repetitions**, coordinating each movement with your breath.

Barrel Rolls

Draw a large circle clockwise with your torso, articulating the movement through the spine for **8-12 repetitions** before changing direction anticlockwise, coordinating each movement with your breath.

Diaphragmatic breathing with heat

1. Find a comfortable position:
Sit in a chair or on the floor with your back straight or lie down on your back. Position a hot water bottle or heat pack on your lower abdomen. You can place one hand on your belly and the other on your chest to feel the movement.
2. Inhale slowly through your nose for 4 counts:
Breathe in slowly through your nose and feel your belly rise as the air fills your lungs.
3. Exhale slowly through your mouth for 8 counts:
Exhale slowly through slightly pursed lips as if blowing out candles your mouth, allowing your belly to fall and soften.
4. Focus on the feeling:
Concentrate on the sensation of your belly expanding with each inhale and contracting with each exhale.
5. Repeat:
Continue the process for **2 to 3 minutes**.

Yin Yoga Heart Opener

Roll up a towel the length of your spine and place pillows to support under the knees and the head.

Align your spine along the towel, allow the knees to fall out to the side onto the pillows, and arms stretch out, palms facing upwards.

The position should be a very mild stretch, or just a pleasant feeling of opening through the front body.

Hold for 3-5 minutes.

Appendix 7: Self-Care Week 3&4

LIFE FIT CORNWALL SPORTS INJURY + MASSAGE THERAPY

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JING ADVANCED MASSAGE TRAINING

Jing Advanced Massage Training
www.jingmassage.com
01273 628942

SELF CARE PLAN

BTEC Research Study Treatment Phase Week 3-4
Date 16th October 2025

This follow along video guides you through a mini self-care class, enhancing the benefits of the exercises - https://youtu.be/mCQANjIP9aU?si=3lVSGlwtL4FR738g

SELF CARE TRACKER

27th October 2025							3rd November 2025						
M	T	W	T	F	S	S	M	T	W	T	F	S	S

Belly Breathing – x10

- Lying on your back in a comfortable position (use pillows if needed)
- Place a hand on your belly, and a hand on your chest
- Inhale through your nose, drawing the air into your belly
- Exhale through your mouth
- Taking loner slower breaths, only your belly hand should move. Your chest should not rise and fall with the breath.

Rib Cage Breathing – x10

- Placing your hands either side of your rib cage
- Continue to inhale through your nose, and exhale through your mouth
- Taking loner slower breaths, feel your rib cage expand outwards

Abdominal massage 10x each direction

- Locate your pubic bone at the very base of your abdomen in the center of your pelvis
- Using soft but intentional pressure with fingers, draw a straight line, over the top of clothes, up to your belly button
- Then find the bony prominence either side of your pelvis
- Draw a diagonal line from your center pubic bone, to just above the right bony point on your pelvis
- Repeat this going from your pubic bone to your left side

Dynamic Childs Pose

- Start on hands and knees
- Inhale and sit your bottom back over your heels and stretch your arms forwards.
- Inhale deep into your pelvic floor and feel it expand
- Exhale and return to hands and knees.

Appendix 8: Self-Care Week 5&6

LIFE FIT CORNWALL | SPORTS INJURY + MASSAGE THERAPY

Tel: 07478650676
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JING ADVANCED MASSAGE TRAINING

Jing Advanced Massage Training
www.jingmassage.com
01273 628942

SELF CARE PLAN

BTEC Research Study Treatment Phase Week 5-6
Date 10th November 2025

This follow along video guides you through a mini self-care class, enhancing the benefits of the exercises - https://youtu.be/_HYKbqNrH3o?si=BHjWa9EMT59xsExp

SELF CARE TRACKER

10th November 2025 17th November 2025

M	T	W	T	F	S	S	M	T	W	T	F	S	S

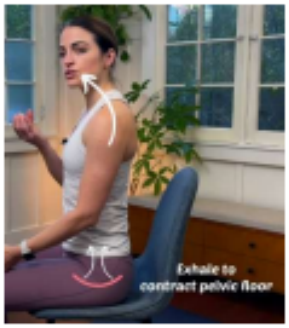
You will need:

- A small rolled up towel
- A firm chair
- A mat (optional)

Kegel Breathwork x10

- Taking a rolled-up hand towel or flannel, place it under your pelvic floor so it is in contact with your vaginal and anal opening.
- Start with awareness of your breath and noticing what your pelvic floor is doing in that process.

- INHALE - breath space between your sits bones. Notice the length created in the pelvic floor and allow it to melt down into the towel.



- EXHALE – like you are blowing out candles, with a little bit of energy in the breath, draw the sits bones together with a gentle contraction of the pelvic floor.

Hip Flexor Stretch x6 each leg

- **Starting position**: Kneel on the floor with one leg forward and the other back, so your front knee is at a 90-degree angle, and your back knee is on the floor. If you feel discomfort in the knee, place a towel or pillow under it for cushioning. Hold on to something for stability if you want.

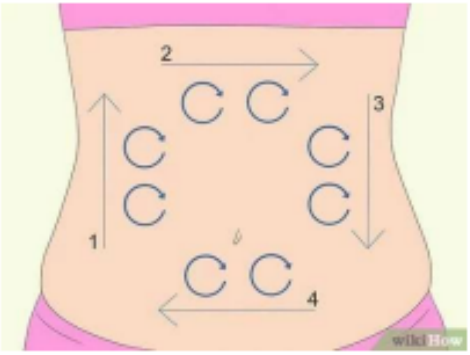
- **Engage your core and tuck your pelvis**: tuck your pelvis under by squeezing your glutes and pulling your belly button in.

1. **Create the stretch**: While maintaining the pelvic tuck, slowly shift your hips forward until you feel a strong but comfortable stretch in the front of the hip and thigh on the side of your back leg.
2. **Hold and repeat**: Hold the stretch for 10-15 seconds, and release, shifting the weight back. Repeat this a further 5 times.
3. **Switch sides**

Abdominal Massage

Step 1: Initial stroking

- Lie flat on your back, you may want to place pillows under your knees for extra comfort.
- Place one hand on top of the other and using firm but gentle pressure with your finger pads, start at your lower right side.
- Make slow, deep circular movements up to your right rib cage, across to your left side, under your rib cage, down your left side to your left hip bone, and across your lower abdominals.
- Repeat this entire circular motion several times.



Step 2: Release

- If you have any localised painful spots, apply firm but comfortable pressure to these areas.
- With a deep inhale through the nose, and a sigh exhale through the mouth, visualise breathing away this pain, and softening the tissues.
- Hold this pressure for a minimum of 30 seconds, or until the pain starts to ease.
- Repeat for other tender spots.

Step 3: Final circular massage

- Finish with 2-3 minutes of gentle, clockwise circular strokes around the whole abdomen.

Appendix 9: Online treatment protocol

ONLINE TREATMENT

EQUIPMENT NEEDED:

- Yoga mat
- Cream or oil
- 2x Pillows
- Chair (if unable to sit or kneel on floor)
- Water

INTRODUCTION

- Welcome
- Thank you
- Check in, injuries, limitations

GROUNDING/CENTERING

- AWARE – feet, wiggle toes, legs, hips, feel weight on chair/floor, spine, head, shoulders. Notice your mood, feelings.
- BALANCE - Front and back, side to side. Relax, soft, allow the breath to flow deeply and freely. What would it look/feel like to be more relaxed etc. Find a moment of peace even in the midst of symptoms
- CONNECT – For the sake of what? What is it you really care about? What are your intentions?

MOVEMENT

- Arm swinging
- Inhale bend and sweep arms up
- Walking/marching
- Squat knee tap to opposite elbow
- Pulse squat – anchor the energy, grounding, chest lifted
- Squat with arm flush – exhale and flush the energy
- Feet wide – bounce, loosen, then start to slow
- Hand on heart, and belly. Breath, big breath in, out with sound. Rub in circles.

- Feet wide, forward fold, and sway.
- Down dog, walk out
- Opposite arm and leg raises
- Hip and heart openers with breathing
- Side to side bend
- Into neck stretch
- Hip flexor to hamstring stretch flow
- Seated tapping and leg massage

ACCUPRESSURE

- Ovary reflex – lateral ankle,
- Right hand – uterus point at base of fingers, massage 2-3 mins
- Abdominal – hand on shoulder, elbow to hip to locate. 20 times

SELF MASSAGE

- Abdominal massage – ILU x10
- From pubis symphysis to belly button x10.
- From pubis symphysis to above ASIS x10

STRETCHING

- Hip flexor
- Hamstring
- Glute
- Happy baby
- Lie prone and wiggle hips
- Cobra
- Childs pose

BREATH WORK & MEDITATION

CLOSING

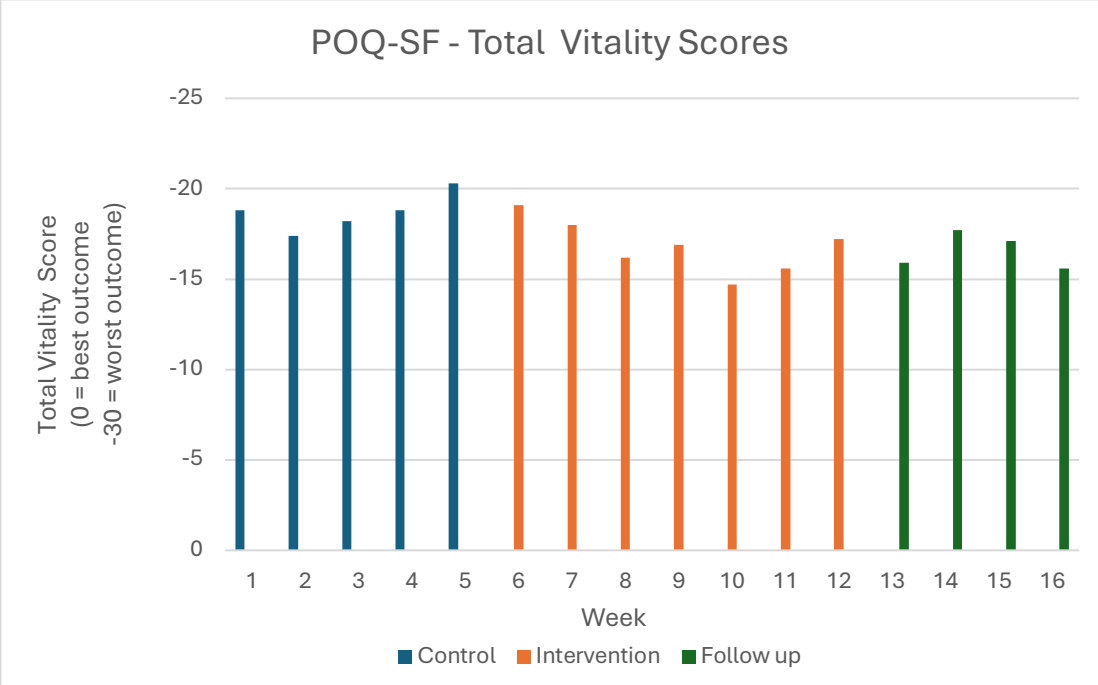
Appendix 10: Table of Participants

Participant baseline and genealogical characteristics

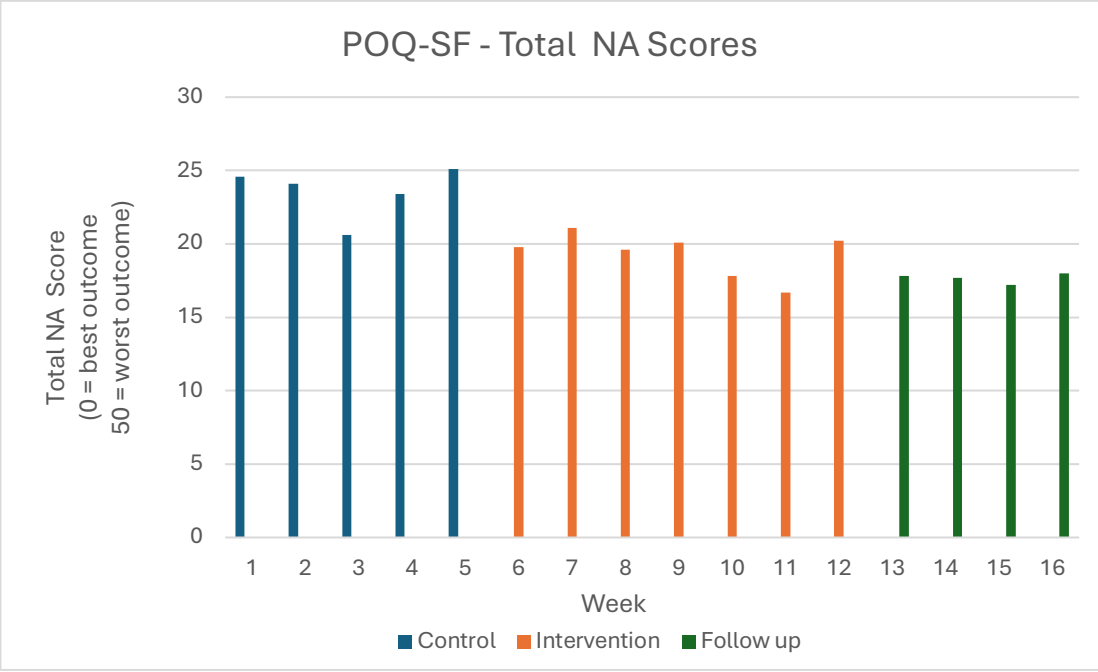
Participants	**Total (n=10)**
Average age	33.4 (±26)
Age of evolution	13.5 (±6)
Age of diagnosis	27.9 (±20)
Years to diagnosis	11.8 (±16)
Medical Interventions	
Oral Contaceptive	1 (10%)
Mirena UIS (containing hormone)	2 (20%)
GnRH Analogues	0 (0%)
Progestogens	1 (10%)
Aromatase inhibitors	0 (0%)
Hormone replacement	0 (0%)
Current Pregnancy Status	
Trying to get pregnant	0 (0%)
Pregnant	0 (0%)
Pain Control Medication	
Paracetamol	10 (100%)
NSAIDS anti-inflammtories	8 (80%)
Opiates	7 (70%)
Previous surgery history related to endometriosis	
Surgery	10 (100%)
Ovary/ies Removed	0 (0%)
Hysterectomy	2 (20%)

Appendix 11: POQ-SF – Results – Fear, Negative Affect & Vitality

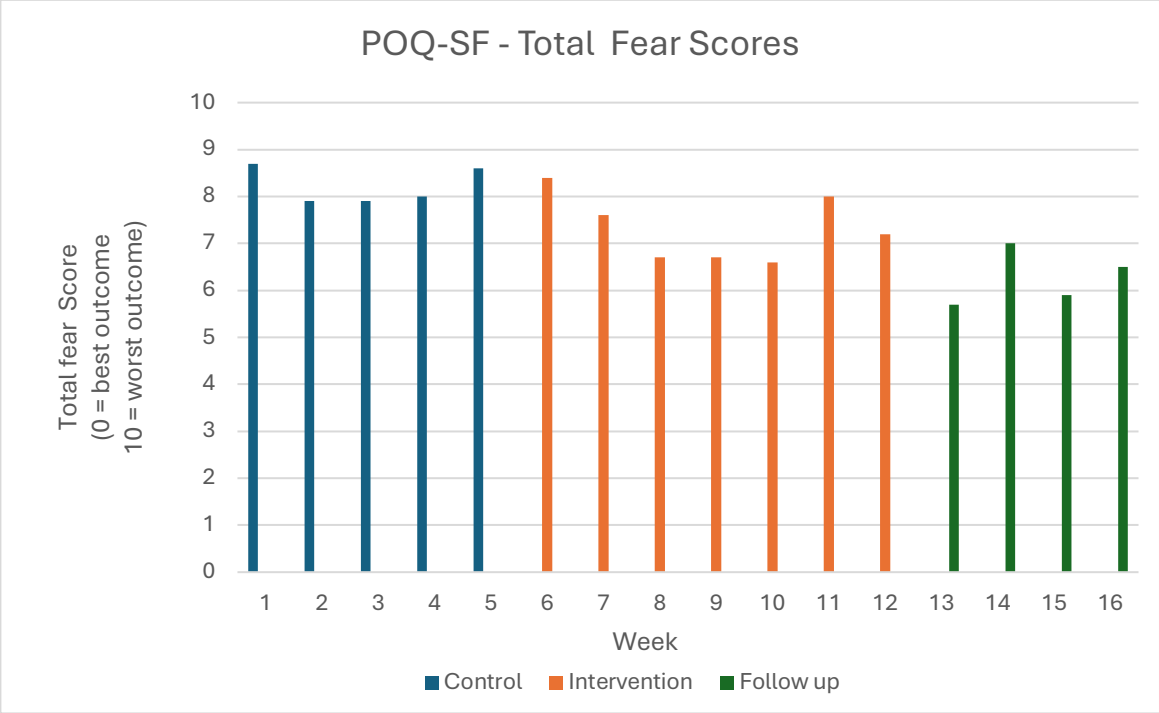
POQ-SF - Vitality



POQ-SF – Negative Affect



POQ-SF – Fear


POQ-SF - Total Fear Scores
Total fear Score
(0 = best outcome
10 = worst outcome)
10
9
8
7
6
5
4
3
2
1
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Week
Control
Intervention
Follow up