



# Clinical Case Report Competition

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A patient-centric approach to massage therapy:  
impacts on quality of life measures for a 55 year old  
female refugee with Post Traumatic Stress Disorder

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## **Abstract**

**Objective:** The objective of this case study was to determine if a patient centered approach to massage therapy treatments could improve quality of life measures for a 55-year old female refugee from Iraq with prolonged Post Traumatic Stress Disorder (PTSD).

**Background:** PTSD is a common disorder in which a person experiences a variety of extreme anxiety symptoms after exposure to a traumatic event. 10 percent of adult refugees in western countries have PTSD. It is often associated with chronic pain, depression and generalized anxiety disorder. Although studies have shown that massage therapy treatments can decrease symptoms of depression, anxiety and the effects of sexual abuse, there have been no studies that specifically examine the application of a patient-centered approach to massage therapy treatments in treating a refugee with PTSD.

**Methods:** 10 treatments were administered over a three-month period. Assessment tools included the *Modified PTSD Symptom Self Report Scale (MPSS-SR)*; the Visual Analog Pain Scale; as well as subjective patient feedback.

**Results:** Scores on the MPSS-SR decreased significantly from 114/119 to 70/119 over a three-month period.

Patient feedback described the following positive outcomes: decreased frequency and severity of PTSD symptoms; increased feelings of safety, support and nurturing; increased sense of body awareness; increased ability to be present with pain sensations; decreased sympathetic nervous system activity; decreased pain; alleviation of negative mood states and feelings; increased positive mood states and feelings; increased motivation to connect with other activities in the community; increased feelings of hope for the future; increased feeling of empowerment to manage physical health; and increased confidence in making decisions for herself. Objective outcomes included decreased hypertonicity of specific muscles, and integration of homecare exercises into the patient's daily routine.

Conclusion: A patient-centered approach did have a positive effect on quality of life measures for this patient, although it is difficult to separate these effects from all other variables. Future studies should focus on determining the effects of massage therapy and psychotherapy combined, versus the effects of each single modality; the effect that therapist and patient traits have on treatment outcomes; and the sustainability of PTSD symptom improvements over time. Greater priority should be placed on creating equitable access to massage therapy for refugees who have trauma and anxiety disorders that could benefit from massage therapy.

**Keywords:** Massage Therapy, Post Traumatic Stress Disorder, Patient Centered-Care, quality of life, refugees, Iraq.

## Introduction

### Post Traumatic Stress Disorder

Post Traumatic Stress Disorder (PTSD) is a common disorder in which a person experiences a variety of extreme anxiety symptoms after exposure to a traumatic event. Although soldiers returning from World War I and II exhibited symptoms of PTSD, it was not officially recognized until 1980 when it appeared in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM). According to the current DSM, community-based studies show a lifetime prevalence for PTSD of approximately eight percent in the adult population of the United States (American Psychiatric Association [APA], 2013). Chronic pain often co-occurs with PTSD (Palyo, 2005). Symptoms are categorized in three clusters: intrusive/reexperiencing; avoidance and hyperarousal. In a PTSD diagnosis, the following criteria are present:

1. The traumatic event is persistently reexperienced in one (or more) of the following ways:
  - (a) recurrent and intrusive distressing recollections of the event, including images, thoughts or perceptions.
  - (b) recurrent distressing dreams of the event.

- (c) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated).
  - (d) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
  - (e) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
2. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:
- (a) efforts to avoid thoughts, feelings, or conversations associated with the trauma.
  - (b) efforts to avoid activities, places, or people that arouse recollections of the trauma.
  - (c) inability to recall an important aspect of the trauma.
  - (d) markedly diminished interest or participation in significant activities.
  - (e) feeling of detachment or estrangement from others.
  - (f) restricted range of affect (i.e. unable to have loving feelings).
  - (g) sense of a foreshortened future (i.e. does not expect to have a career, marriage, children, or normal lifespan).

3. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:

- (a) difficulty falling or staying asleep;
- (b) irritability or outbursts of anger;
- (c) difficulty concentrating;
- (d) hypervigilance; and
- (e) exaggerated startle response.

To be diagnosed as PTSD the duration of symptoms must occur for more than one month and the symptoms must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. If the duration of symptoms is less than three months, it is considered to be *acute* PTSD; if the duration of symptoms is three months or more, it is classified as *chronic* PTSD (APA, 2013).

PTSD is associated with both structural and functional abnormalities of the brain. Research demonstrates that trauma has long-term effects on neurochemical responses to stressful events, and involves mesolimbic brain structures such as the amygdala, hippocampus, hypothalamus and thalamus. Studies have shown that PTSD is associated with cell death of

hippocampal neurons, which leads to reduced volume of the hippocampus – an area of the brain associated with memory. A number of neurotransmitters are also affected including: dopamine; norepinephrine; epinephrine; opioid peptides; serotonin; gamma-aminobutyrate (GABA); glutamate and acetylcholine. PTSD is also associated with disruption in the hypothalamic-pituitary-adrenal (HPA) axis, which is involved in stress responses (Bowirrat, 2010).

Many variables are associated with the risk of developing PTSD including: the severity of the event; history of previous trauma; presence of a preexisting psychiatric disorder; insufficient support systems; and the nature of the recovery environment, among other factors. PTSD is commonly treated with a combination of psychotherapy and medication such selective serotonin reuptake inhibitors (SSRIs) and sleeping aids (Bowirrat, 2010).

## Patient Centered-Care

In 2001, the Institute of Medicine's report *Crossing the Quality Chasm* identified "patient-centered care" (PCC) as one of six aims for high-quality health care, bringing the term into health policy discourse. The report defined patient-centered care as: "health care that establishes a partnership among practitioners, patients, and their families (when appropriate) to ensure that decisions respect patients' wants, needs, and preferences and that patients have the education and support they need to make decisions and participate in their own care."

In 2007, The Commonwealth Fund reviewed various PCC models and frameworks and identified six common elements amongst them:

1. Education and shared knowledge;
2. Involvement of family and friends;
3. Collaboration and team management;
4. Sensitivity to nonmedical and spiritual dimensions of care;
5. Respect for patient needs and preferences; and
6. Free flow and accessibility of information.

Cultural competency is also an important aspect of PCC. It involves practitioner competencies in cross-cultural communication, situational and

self-awareness, adaptability to different patient needs and characteristics, and knowledge about core cultural issues (Teal, 2009). The application of PCC asks the health care provider to understand the patient as a unique individual and to engage the patient as an active and empowered participant in their own personalized care. This involves health care providers who explore and respect the patient's values, beliefs, preferences, needs, hopes, cultural background and ways of dealing with adversity, and who work to build rapport and trust with the patient. PCC requires a coordinated community of health care professionals working together with these goals in mind (Epstein, 2010).

Throughout this case study efforts were made to follow these principles by maintaining communication with the patient's Psychologist (via her Nurse Practitioner) and Social Worker; undertaking additional research regarding Iraqi cultural norms and ways of communicating; empowering the patient to communicate her wants, needs and preferences, and being responsive to those needs; and by working together with the patient to establish appropriate homecare that was educational and effective. Being sensitive to emotional and spiritual needs was also an integral part of the treatments: the patient was given time to rest after treatments when desired, and space was created for the patient to make prayers when Muslim prayer times coincided with massage appointments. All of these

elements helped to build trust and rapport between the patient and therapist, and ensured a patient-centered approach.

Evidence demonstrates that patient-centered care improves disease related outcomes and quality of life measures (Lewin, 2001). It can do so directly, by reducing anxiety and depression, and indirectly by building trust and social support, which increase patients' ability to cope with adversity (Street, 2009). PCC is especially relevant in addressing racial and socioeconomic disparities in treatment and care, and has the potential to make health care more accessible for refugee populations (Saha 2008, Teal 2009).

### Refugees and PTSD

The 1951 Refugee Convention defines the term 'refugee' as someone who "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country" (United Nations High Commissioner for Refugees [UNHCR], 2013). In 2011 there were 15.2 million refugees in the world (UNHCR, 2011); Canada provides asylum to approximately 12,000 refugees per year (Government of Canada, 2011).

A meta-analysis of studies that included almost 7000 refugees resettled in developed countries, reported that one in 10 adult refugees in western countries has PTSD; approximately one in 20 has major depression; and about one in 25 has generalized anxiety disorder - with high rates of comorbidity amongst these conditions (Fazel, 2005). One third of refugees who develop PTSD may remain symptomatic for more than three years and are at risk of secondary problems, such as substance abuse (Rousseau, 2011).

For many refugees, mental health is affected by past events and experiences as well as current events. Many Iraqi refugees have experienced a series of pre-migration and post-migration traumas. Pre-migration traumas may include multiple relocations; unsanitary refugee camps; poor nutrition; torture and/or death of family and friends; sexual assault; and constant threats to safety. Once they arrive to a new country many Iraqis are faced with unemployment; isolation; discrimination; lack of a social network; and lack of social integration. These cumulative stressors can have serious impacts on mental health and quality of life (Jamil, 2007).

## Massage Therapy and PTSD

Studies have demonstrated that massage therapy can reduce symptoms that are associated with PTSD such as anxiety, depression (Field 1996, Moyer 2004) and the effects of sexual abuse (Field, 1997). In addition, a pilot study found that Swedish massage combined with psychotherapy had a positive effect on mental health measures (Collinge, 2005).

Social isolation and low levels of social support consistently have been associated with higher levels of stress, anxiety, depression and PTSD, whereas increased social support appears to have protective effects on mental and physical health, enhancing an individual's resilience to stress (Palyo, 2005). When a patient with PTSD is given the opportunity to experience positive, safe and caring touch through massage therapy, this may encourage the patient's willingness to seek other forms of support, connection, or community involvement.

Higher levels of PTSD symptoms and pain are associated with less perceived control over one's life (Palyo, 2005). Massage therapy can empower the patient to feel in control of their massage therapy treatments and their homecare efforts. Patients are empowered to guide the treatment in terms of preferred modalities, and know that they can stop the

treatment, or ask to change the treatment at any time. Patient and therapist work together to select homecare options that help the patient regain a sense of control over managing symptoms.

Although massage therapy techniques have been studied for their positive effects in treating anxiety, depression and recovery from sexual abuse, no research to date has specifically examined the application of a patient-centered massage therapy approach in treating an Iraqi refugee with PTSD.

This case study explores the research question: Will a patient-centered approach to massage therapy treatments improve quality of life for a 55 year old female refugee with Post Traumatic Stress Disorder?

## **Methods**

In order to find a case study participant, the researcher contacted various health clinics and organizations in the greater Vancouver area that work with refugee populations. The Raven Song Community Health Centre responded with a suggested patient.

### Patient history

The patient was a 55-year old Iraqi woman who was exposed to multiple traumas during the Iraq war. The patient moved to Canada in 2009 and was diagnosed with prolonged PTSD in 2010. She lives by herself and is not able to work. The money she receives from the government pays for her rent, with \$100 per month remaining for all other expenses. She is estranged from her daughter, with whom she arrived to Canada with. The patient has a high school level education and had not previously been exposed to massage therapy, the patient believed that Massage Therapy could help her to manage her emotions. The patient's activities of daily living include: a small amount of cooking, laundry, grocery shopping, and carrying groceries, and long periods of lying down on her right side. She does not leave her apartment very often. The patient has two to three

appointments per month with a psychologist, and sees her social worker, nurse and urologist as needed.

*Other diagnosed conditions include:*

- Osteoarthritis bilateral knees (diagnosed in 2011 – onset: 2000).
- Urinary incontinence (diagnosed in 2011).
- Spondylosis of mid-lumbar spine (onset of back pain – 2003; CT done in 2011).
- Two suicide attempts: 2008/09 (Iraq) and 2012 (Canada).

*Regular medications as of Feb 26, 2013:*

Setraline 150 mg, 1 tab per day

Mirtazapine 15 mg, 3 tabs per day

Pantoprazole 40 mg, 1 tab daily

*Medication as of March 8, 2013:*

Setraline 150 mg, 1 tab per day

Mirtazapine, 15 mg, 3 tabs before bed

Pantoprazole 40 mg, 1 tab daily

Quetiapine, 25 mg (1/2 tab to 1 ½ tabs before bed)

## Assessment

### *Observations*

The patient uses a cane with her right hand, favouring her left leg in activities of daily living. The patient has a hyper-kyphotic posture with elevated and protracted scapulae. Bilateral bunions with hallux valgus are also present.

### *Palpation*

Bilateral: hypertoned upper trapezius; levator scapula and pectoralis major muscles. (The right side more so than the left).

### *Neurological symptoms and pain*

Due to spondylosis of the mid-lumbar spine, the patient experiences tingling and pain from the left lumbar region down the left posterior thigh and leg, to the posterior ankle. At its worst the patient rates the pain as 10 out of 10. At its best, it is not noticeable (0 out of 10). The patient's osteoarthritis (bilateral knees) causes local pain which is a 7.5 out of 10 at its worst and a 4.5 out of 10 at its best.

### *Special tests*

In an effort to minimize patient discomfort with clinical assessment procedures the following special tests were administered before the first treatment only:

- Blood pressure: 122/78
- Heart rate: 52
- Rate of breathing: 12 breaths per minute

The patient had an emotional reaction after these tests were administered.

### *Outcome measurement tools*

To evaluate treatment outcomes, the *Modified PTSD Symptom Scale Self Report (MPSS-SR)* was administered before the first treatment, one month after the sixth treatment, and 10 days after the tenth treatment. This scale was chosen for its ability to assess both frequency and severity of PTSD symptoms and for its usefulness in measuring changes in PTSD symptoms over time.

The MPSS-SR consists of 17 items that correspond to DSM symptom criteria. Questions are asked regarding symptoms in the two-week period prior to the time of administration (Falsetti, 1993).

Subjective patient feedback and comments were recorded before and after every treatment. Together, these two tools were used to assess quality of life measures. A Visual Analog Scale was used to gauge general levels of back and knee pain before the first treatment and after the last treatment. Tools to gather data regarding hours of sleep per night and daily rating of pain levels were withdrawn upon request of the patient's Psychologist (see *Adaptations to Treatment and Appendix B*).

### Treatment plan

#### *Treatment rationale*

Massage therapy is an effective modality for treatment of PTSD. As previously mentioned, studies have demonstrated that massage therapy decreases symptoms of anxiety and depression, and the effects of sexual abuse. Massage therapy can also enhance a patient's resilience to stress by decreasing their social isolation and increasing their levels of social support (Palyo, 2005). Furthermore, massage therapy can assist the patient in regaining a sense of control in their life through creating healthy boundaries in the treatment space and by finding homecare that helps the patient to manage their own health.

A small number of specific techniques have been demonstrated to elicit a parasympathetic nervous system (PNS) response, and/or to decrease symptoms of depression and anxiety, and were therefore incorporated into the treatment plan:

### *1. DIAPHRAGMATIC BREATHING*

Diaphragmatic breathing promotes relaxation by decreasing the effects of the sympathetic nervous system (Rattray, 2005).

### *2. MODERATE PRESSURE MASSAGE*

Moderate pressure massage elicits a parasympathetic nervous system response, which can positively affect neuro-endocrine function, psychological outcomes, and immune function (Diego, 2009).

### *3. SLOW STROKE BACK MASSAGE*

Slow stroke back massage (SSBM) involves slow rhythmic stroking, covering an area two inches wide on both sides of the spinous processes (from the crown of the head to the sacrum) at a rate of one stroke per inch, per second. SSBM has been shown to produce changes in vital signs which are indicative of relaxation, such as decreased blood pressure, decreased heart rate, and increased skin temperature (Meek, 1993).

#### 4. *STATIC CONTACT*

Static contact involves motionless contact of the therapist's hands with the patient's body and is performed with minimal force. It is noted as a technique that is appropriate for developing trust, fostering relaxation and improving body awareness (Andrade, 2008).

Other techniques incorporated into treatments included general Swedish massage, myofascial release, a small amount of gentle trigger point release and guided visualization techniques.

##### *Treatment goals*

- Acquaint patient with positive touch, allowing patient to establish safe boundaries and practice communicating those boundaries.
- Decrease frequency and severity of PTSD symptoms.
- Decrease sympathetic nervous system response.
- Increase patient's body awareness.
- Decrease hypertonicity of specific muscles (as requested by the patient).
- Patient education regarding diaphragmatic breathing (technique and benefits).
- Patient education regarding homecare exercises (techniques and benefits).

### *Management Plan*

Administer 10 treatments over the course of 3 months.

Techniques used during treatments will include diaphragmatic breathing; moderate pressure massage (Swedish massage); slow stroke back massage; static contact; myofascial release; guided visualization techniques; and gentle trigger point release, as appropriate.

Patient requests for treatment options (including possible modalities and positioning) will be discussed and agreed upon before each treatment begins. Frequent check-ins with the patient will be used to assess general physical and emotional comfort level; client reactions to level of therapist pressure; and acceptability of touch to a particular area of the body.

Consensus and cooperation between patient and therapist, and patient safety and comfort will be of utmost importance. A clear understanding will be established that the patient has the power to stop, change, or modify the treatment at any time.

### *Treatment procedures*

10 treatments were administered between March 8, 2013 and May 29, 2013 with a span of one month in between treatments six and seven.

Appointments were scheduled weekly. Appointments lasted an average of 90 minutes in length, with hands-on treatment time averaging 45 minutes per treatment.

(For detailed treatment protocol and homecare options including hydrotherapy, stretching and remedial exercise, please refer to: Appendix C: Treatment Summaries.)

### *Adaptations to treatment*

The treatments were administered through the patient's clothing in order to maximize patient comfort. More time was allotted to each treatment to build rapport and trust between the therapist and patient; to accommodate the patients' need to use the bathroom more frequently; and to allow the patient time to pray when appointments coincided with Muslim prayer times.

After the first treatment, the client was provided with templates to fill out in order to gauge the treatments' effects on pain levels, sleep patterns, and

general body sensations. Although the patient initially felt very well after the first treatment, she reported the next day that her mind was “running in circles” and she was experiencing some mental agitation and an increase in psychotic symptoms such as hearing voices. The patient’s Nurse Practitioner contacted the researcher with the Psychologist’s request that no homework be given that involved “mental work” as this was triggering the patient’s symptoms. The patient’s Psychologist prescribed an additional medication (Quetiapine). The patient reported she was sleeping much better with the change in medication and was still very interested in receiving massage. Making adaptations to treatment, in coordination with the patient and the patient’s health care providers, ensured an approach that was responsive to patient needs and therefore supported patient comfort and trust.

## Results

*All treatment goals were achieved:*

- Acquaint patient with positive touch, allowing patient to establish safe boundaries and practice communicating those boundaries (*patient responded positively to the treatments, established boundaries and communicated those boundaries*).
- Decrease frequency and severity of PTSD symptoms (*see outcome 1*).
- Decrease sympathetic nervous system response (*see outcome 5*).
- Increase patient's body awareness (*see outcome 3*).
- Decrease hypertonicity of specific muscles (as requested by the patient) (*see outcome 13*).
- Patient education regarding diaphragmatic breathing (technique and benefits) (*see outcome 14*).
- Patient education regarding homecare exercises (techniques and benefits) (*see outcome 14*).

## Outcomes

### Outcome 1: Decreased frequency and severity of PTSD Symptoms

#### PTSD Symptom Scale Self Report Data

Date of administration	Frequency of Symptoms (Score)	Severity of Symptoms (Score)	TOTAL (Score)
March 8, 2013 (Before tx 1)	48/51	66/68	<b>114/119</b>
May 8, 2013 (1 month after tx 6)	35/51	44.5/68	<b>79.5/119</b>
June 9, 2013 (10 days after tx 10)	32/51	38/68	<b>70/119</b>

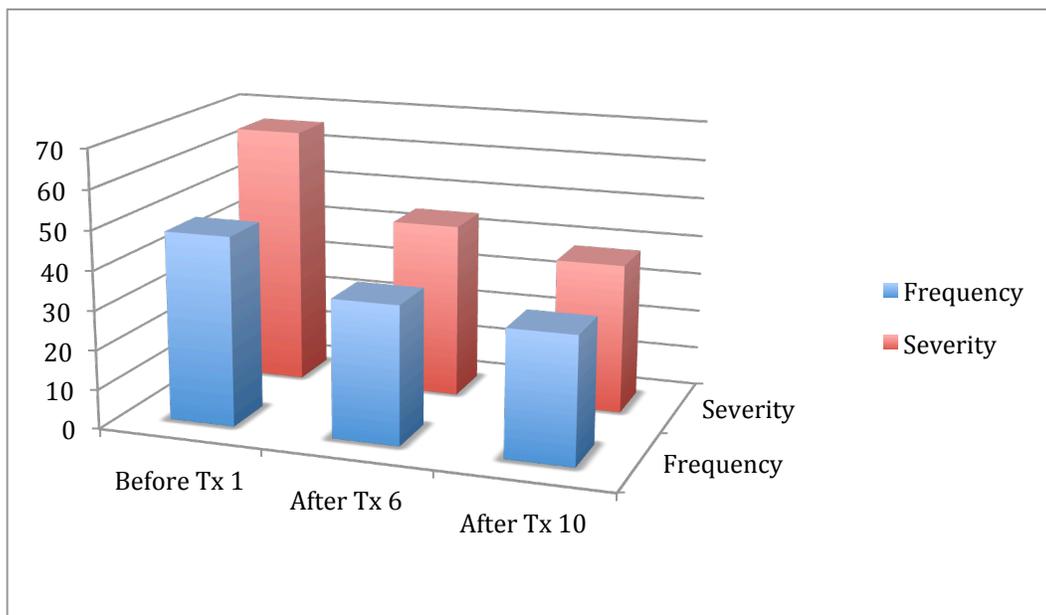


Table 1: PTSD Assessment Scale Data

Subjective feedback provided by the patient allowed the patient to communicate the impacts and effects of the massage therapy treatments in her own words.

Using a patient-centered approach supported positive patient outcomes throughout this case study. The patient specifically mentioned how she appreciated and saw benefit from specific elements of PCC such as cultural sensitivity, responsiveness to patient needs and coordination of health care providers: *“You let me pray, give me water. You are so kind to me. I have these memories of you now. I lost love a long time ago from my life. But you help me feel hope again”* (tx 8). *“You, [my psychologist], and [my Social Worker], help me to make little steps”* (tx 8).

*The patient’s perspective:*

Before the first treatment the patient described her situation as follows:

*“My whole life is stress. I will never be who I want to be. I’m retired from life. I lost my world, but I have to live [...] I feel like there’s a punishment waiting for me all the time.”*

*“Some bad memories are coming back. My heart was beating fast and I felt sad. I tried to lift myself out of this feeling. I can’t help my soul to forget*

*these things. You are so good to me but you are one small piece inside my body. I have many painful things inside my soul. I feel it very deeply inside me, like a storm. Very dark” (tx 5).*

*“Sometimes I can’t breathe. I am stuck inside a circle [of thoughts and emotions]” (tx 7).*

Although the patient struggled with PTSD symptoms throughout the case study period, the patient felt the massage treatments had a very positive impact on her life: *“[...] these massages really helped me to make some big changes in my life. You help[ed] me to calm my emotions and find ways to take care of my body. Thank you so much” (final assessment).*

The patient mentioned a number of specific outcomes:

**Outcome 2: Increased feelings of safety, support and nurturing**

*“I felt I am safe here. My body is safe. I felt like I had a family around me” (tx 1); “I felt safe because you are with me” (tx 6).*

*“I really felt better [after the last] massage. I discovered a change in my feelings. I felt safe and friendly. I need this warm feeling... that someone is*

*looking after me. It's something I've never felt before. I was completely alone before. You really care"* (tx 7).

*"I trust you. You really try to help me and I can feel it (tx 7).*

*"[When you massage me] it feels like when the mother touches the baby – nurturing and caring"* (tx 8).

### **Outcome 3: Increased sense of body awareness**

### **Outcome 4: Increased ability to be present with pain sensations**

The patient commented on increased awareness of pain sensations in her mid-back, neck and shoulders and right hand and she notes that tensions in her chest feel 'clearer' (tx 1). *"I felt my body in a new way. Thank you so much"* (tx 1).

*"When I feel pain in my body, I think 'don't be afraid – someone is here who cares about you"* (tx 3).

*“Sometimes I tighten my body – I feel small but safe. Today I feel something beautiful in my body. I let my body open and feel big. My body has a freedom! I felt safe because you are with me” (tx 6).*

*“I love my body: we are friends now!” (tx 6).*

**Outcome 5: Decreased sympathetic nervous system activity**

*“It’s like when the mother touches the baby: I feel a peace inside that I never felt before”. Patient said that during the SSBM and circular effleurage on the back she felt “calm, peaceful and quiet” (tx 1).*

*“When you start the massage I feel calm.” (tx 3).*

*“I feel calm and quiet inside. I feel a change inside with you. Something very good” (tx 4).*

*“I feel very relaxed. I could fall asleep!” (tx 5).*

### **Outcome 6: Decreased pain**

*"[After the last treatment] my back felt very well. I felt like a bird"* (tx 3).

*"My body feels no pain when you are finished the massage. The pain disappears! I am a young woman! I'm all right. I'm not sick. I like this feeling so much. I want to keep this feeling"* (tx 4).

*"The pain left me. I usually carry it every minute"* (tx 6).

Perception of bilateral knee pain decreased from a 7.5/10 to a 6/10 (at its worst) and from a 4.5/10 to a 4/10 (at its best). Lower back pain remained the same (10/10 at its worst, and 0/10 at its best).

### **Outcome 7: Alleviation of negative mood states and feelings**

*"Really I feel a difference in my body and emotions"* (the day after tx 2).

*"Sometimes I feel anxious at night; the movies and photos start at night [visual disturbances and voices]. With the breathing [homecare] my heart felt open and alive. It was good for my mind and my heart. The nighttime is the hardest. It's like a cage in my mind. But these exercises helped me"* (tx 6).

*“You let me be free from my cage. I love this feeling. A break from my negative thoughts and feelings” (tx 10).*

Patient reported that during the treatments she feels her “sadness and difficulties” leave her body (final assessment).

**Outcome 8: Increased positive mood states during and after the massage treatment (commonly lasting for two days)**

*“My heart feels warm. I am happy. I feel safe. My heart is beating slowly. There is a peace inside my body. [I feel that] I am all right. I am okay” (tx 3).*

*“Jenn I am happy... very happy”; “I feel so happy. I want to keep this feeling” (during tx 4).*

*“I feel very well, especially in my heart. I told [my psychologist] that I feel free. I am free in my feeling. When I go to the Doctor’s office I feel sick/bad, but when I come for massage I feel something completely different. Something inside my body feels free” (after tx 4).*

*“I love to come here. It makes my mind open. Just thinking about you and the massage makes me happy. That feeling of happiness doesn’t come easy for me” (tx 7).*

The patient reported that she “smiling and in a good mood” after the massage (after tx 10).

**Outcome 9: Increased motivation to connect with other activities in the community**

*“Massage has opened my mind to other activities I might like. I asked [my psychologist] about other activities that can help me feel this way. I know you can’t see me everyday!” (tx 7).* (Patient and psychologist agreed to find a volunteer opportunity for the patient to work with children once her bladder incontinence is under control).

**Outcome 10: Increased feelings of hope for the future**

*“You believe in me and help me. I feel a new sense of hope. You, [my psychologist], and [my Social Worker], help me to make little steps. You are the first person in Canada that helped me to feel hope. The massage is something I look forward to. When I see you, I feel better. [My psychologist], is trying to help me find something else I can do that brings*

*me this good feeling. Here in this massage clinic, something changed inside me for the better” (tx 8).*

**Outcome 11: Increased feeling of empowerment to manage physical health**

*“I used to be so disconnected from my body. You help me to take care of it and do good things for myself” (tx 9).*

Regarding the sun-breath exercise: *“I love these! When I do them I feel young!” (tx 10).*

**Outcome 12: Increased confidence in making decisions**

(The patient mentioned a lifetime history of not being allowed to make decisions for herself, and being told that she was too weak to make good decisions for herself.) *“I felt I was weak and couldn’t make decisions in my life before. But I made a choice to come for massage and I love massage! I made a good decision!” (tx 8).*

### Objective outcomes

**Outcome 13: Decreased muscle hypertonicity in the patient's upper trapezius, levator scapulae and pectoralis major muscles (bilaterally).**

**Outcome 14: integration of a number of homecare exercises into the patient's daily routine**

### Study Limitations

The accuracy of the MPSS-SR measurements could have been affected by misunderstandings of the meaning of words or questions, as English is the patient's second language. The amount of pressure used for each technique was not measured in a precise way that would permit exact replication. Replication of exact characteristics of the therapist and the recipient is also not possible.

It is difficult to isolate the effects of the massage therapy intervention from the benefits of regular psychotherapy sessions, or other external variables such as the addition of new medication, or changes in mood that were influenced by the change in season from winter to summer.

## **Conclusion and Recommendations**

Utilizing a patient-centered approach to massage therapy treatments did have a positive outcome on quality of life for the patient, as measured by the *Modified PTSD Symptom Scale Self Report (MPSS-SR)*, and subjective patient feedback. Scoring on the MPSS-SR decreased a total of 44 points, from 114 to 70. Subjective feedback from the patient reported the following positive outcomes:

1. decreased frequency and severity of PTSD symptoms;
2. increased feelings of safety, support and nurturing;
3. increased sense of body awareness;
4. increased ability to be present with pain sensations;
5. decreased sympathetic nervous system activity;
6. decreased perception of pain;
7. alleviation of negative mood states and feelings;
8. increased positive mood states during and after the massage tx;
9. increased motivation to connect with other activities in the community;
10. increased feelings of hope for the future;
11. increased feeling of empowerment to manage physical health; and

12. increased confidence in making decisions.

Objective outcomes included:

13. decreased muscle hypertonicity in the patient's upper trapezius, levator scapulae and pectoralis major muscles (bilaterally); and

14. integration of a number of homecare exercises into the patient's daily routine.

The positive effects of massage therapy on PTSD and associated symptoms of anxiety and depression are due to both its physiological and psychological benefits. Physiologically, massage therapy promotes parasympathetic activity, promotes restorative sleep, and may increase feelings of well-being by influencing the body chemistry of the patient (Moyer, 2004). It has also been hypothesized that some of massage therapy's positive effects may result from: the interpersonal contact and communication that take place during the treatment; the therapist's personal characteristics; and the patient's attitude towards the therapist (Moyer, 2004).

To further explore the effects of massage therapy on recovery from PTSD, investigation of the following research questions would be beneficial:

What are the effects of massage therapy and psychotherapy combined versus the effects of each single modality? How much of an effect do therapist and patient personal traits have on treatment outcomes and which traits are associated with positive outcomes? Are the positive benefits of massage therapy sustained over time? Is there a minimal or optimum amount of massage time required for maximum benefit?

Providing refugees with equitable access to massage therapy services can improve quality of life measures for new Canadians struggling with a variety of physical and mental health issues. There is a need for accessible, culturally sensitive assessment and treatment of refugees, which is dependent on knowledgeable health care practitioners who are supported by the Canadian health care system. Additional training for Registered Massage Therapists in cross-cultural competencies and patient-centered care would be a step in the right direction. Additionally, funding should be provided to ensure refugees have access to this highly effective modality, especially for treatment of trauma, anxiety and depression related conditions.

## References

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (5<sup>th</sup> ed). Washington: American Psychiatric Association; 2013.
2. Andrade C, Clifford P. Outcome based massage from evidence to practice (2<sup>nd</sup> ed). New York: Lippincott, Williams & Wilkins; 2001.
3. Bowirrat A, Chen T, Blum K, Madigan M, Bailey J, Chen A, Gold M, et al. Neuro-psychopharmacogenetics and neurological antecedents of Post Traumatic Stress Disorder: Unlocking the mysteries of resilience and vulnerability. *Journal of Current Neuropharmacol.* 2010;8(4):335-358.
4. Collinge W, Wentworth R, Sabo S. Integrating complementary therapies into community mental health practice: An exploration. *The Journal of Alternative and Complementary Medicine.* 2005;11(3):569-574.
5. Committee on Quality of Health Care in America, Institute of National Medicine. *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century.* Washington: National Academies Press; 2001.

6. Diego M, Field T. Moderate pressure massage elicits a parasympathetic nervous system response. *International Journal of Neuroscience*. 2009;119:630-638.
7. Epstein RM, Fiscella K, Lesser CS, Stange KC. Why the nation needs a policy push on patient-centered health care. *Health Affairs*. 2010; 29(8),1489-1495.
8. Falsetti SA, Resnick HS, Resick PA, Kilpatrick DG. The modified PTSD symptom scale: A brief self-report measure of Post Traumatic Stress Disorder. *The Behavior Therapist*. 1993;16(6):161-162.
9. Fazel M, Wheeler J, Danesh J. Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systemic review. *The Lancet*. 2005;365:1309-1314.
10. Field T, Ironson G, Safidi F, Nawrocki T, Goncalves A, Burman I, et al. Massage therapy reduces anxiety and enhances EEG patterns of alertness and math computations. *International Journal of Neuroscience*. 1996;86:197-205.

11. Field T, Hernandex-Reif M, Hart S, Quintino O, Drose L, Field T, et al. Effects of sexual abuse are lessened by massage therapy. *Journal of Bodywork and Movement Therapies*. 1997;1:65-69.
12. Government of Canada [Internet]. Ottawa: Citizenship and Immigration Canada; c2011 [updated 2012 Oct 10; cited 2013 May 5]. A history of refuge; Available from: <http://www.cic.gc.ca/english/refugees/timeline.asp>
13. Jamil H, Farrag M, Hakim-Larson J, Kafaji T, Abdulkhaleq H, Hammad A. Mental health symptoms in Iraqi refugees: Post Traumatic Stress Disorder, anxiety, and depression. *Journal of Cultural Diversity*. 2007;14(1):19-25.
14. Lewin SA, Skea ZC, Entwistle V, Zwarenstein M, Dick J. Interventions for providers to promote a patient-centered approach in clinical consultations. *Cochrane Database Syst Rev*. 2001;(4):CD003267
15. Meek S. Effects of slow stroke back massage on relaxation in hospice clients. *Journal of Nursing Scholarship*. 1993;25(1):17-21.

16. Moyer CA, Rounds J, Hannum JW. A meta-analysis of massage therapy research. *Psychological Bulletin*. 2004;130(1):3-18.
17. Palyo SA, Beck JG. Post-traumatic stress disorder symptoms, pain, and perceived life control: Associations with psychosocial and physical functioning. *Journal of the International Association for the Study of Pain*. 2005;117:121-127.
18. Saha S, Beach MC, Cooper LA. Patient centeredness, cultural competence, and healthcare quality. *J Natl Med Assoc*. 2008; 100(11):1275-85.
19. Street RL, Makoul G, Arora NK, Epstein RM. How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Educ. Couns*. 2009;74(3):295-301.
20. Teal CR, Street RL. Critical elements of culturally competent communication in the medical encounter: a review and model. *Soc Sci Med*. 2009; 68(3): 533-43.

21. United Nations High Commissioner for Refugees [Internet]. Geneva: United Nations; c2001-2013 [updated 2013. cited 2013 May 5]. Refugees; Available from: <http://www.unhcr.org/pages/49c364c125.html>
  
22. United Nations High Commissioner for Refugees [Internet]. Geneva: United Nations; c2001-2013 [updated 2011. cited 2013 May 5]. Statistical yearbook: Trends in displacement, protection and solutions. Available from <http://www.unhcr.org/516282cf5.html>
  
23. Rattray F, Ludwig L. Clinical Massage Therapy. Elora: Talus Incorporated; 2005.
  
24. Rousseau C, Pottie K, Thombs B, Munoz M, Jurcik T. Appendix 11: Post traumatic stress disorder: Evidence review for newly arriving immigrants and refugees. In: Pottie K, Greenway C, Feightner J, et al. Evidence-based clinical guidelines for immigrants and refugees. Canadian Medical Association Journal. 2011; DOI 10.1503/cmaj 090313
  
25. Shaller D. Patient-Centered Care: What Does It Take? Washington: The Commonwealth Fund. 2007;74.

## **Biography**

Jenn Sharman is a student at the West Coast College of Massage Therapy in New Westminster, British Columbia. Jenn has an undergraduate degree in International Development and has worked on a variety of community development initiatives in the Northwest Territories and internationally. Jenn has experience conducting research and managing projects across the Northwest Territories and Nunavut, as well as experience working in the field of workplace and employee wellness. This case study project was the first time that her passions for health care, human rights and massage therapy were able to combine. Jenn is looking forward to continuing her work in these fields.

## APPENDIX A: MODIFIED PTSD SYMPTOM SCALE SELF REPORT

The purpose of this scale is to measure the frequency and severity of symptoms in the past two weeks that you may have been having in reaction to a traumatic event or events. Please indicate the frequency, how often you have the symptom, to the left of the item. Then indicate the severity (how upsetting the symptom is) by circling the letter that fits best on the right side.

### FREQUENCY

0 = NOT AT ALL  
 1 = ONCE A WEEK OR LESS  
 2 = 2 TO 4 TIMES A WEEK  
 3 = 5 OR MORE TIMES A WEEK

### SEVERITY

A=NOT AT ALL DISTRESSING  
 B=A LIT BIT DISTRESSING  
 C=MODERATELY DISTRESSING  
 D=QUITE A BIT DISTRESSING  
 E=EXTREMELY DISTRESSING

### FREQUENCY

### SEVERITY

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| _____ 1. Have you had repeated or intrusive upsetting thoughts or recollections of the event(s)?.....  | A | B | C | D | E |
| _____ 2. Have you been having repeated bad dreams or nightmares about the event(s)?.....   | A | B | C | D | E |
| _____ 3. Have you had the experience of suddenly reliving the event(s), flashbacks of it or acting or feeling as if the event were happening again?..... | A | B | C | D | E |
| _____ 4. Have you been intensely EMOTIONALLY upset when reminded of the event(s), including anniversaries of when it happened?.....                      | A | B | C | D | E |
| _____ 5. Do you often make efforts to avoid thoughts or feelings associated with the event(s)?.....  | A | B | C | D | E |
| _____ 6. Do you often make efforts to avoid activities, situations, or places that remind you of the event(s)?....                                       | A | B | C | D | E |
| _____ 7. Are there any important aspects about the event(s) that you still cannot recall?.....   | A | B | C | D | E |
| _____ 8. Have you markedly lost interest in free time activities that used to be important to you?.....  | A | B | C | D | E |

FREQUENCY

- 0 = NOT AT ALL
- 1 = ONCE A WEEK OR LESS
- 2 = 2 TO 4 TIMES A WEEK
- 3 = 5 OR MORE TIMES A WEEK

SEVERITY

- A=NOT AT ALL DISTRESSING
- B=A LIT BIT DISTRESSING
- C=MODERATELY DISTRESSING
- D=QUITE A BIT DISTRESSING
- E=EXTREMELY DISTRESSING

FREQUENCY

SEVERITY

- \_\_\_\_ 9. Have you felt detached or cut off from others around you since the event?..... A B C D E
- \_\_\_\_ 10. Have you felt that your ability to experience emotions is less (unable to have loving feelings, feel numb, or can't cry when sad)?..... A B C D E
- \_\_\_\_ 11. Have you felt that any future plans or hopes have changed because of the event(s) (for example: no career, marriage, children, or long life)?..... A B C D E
- \_\_\_\_ 12. Have you been having a lot of difficulty falling or staying asleep?..... A B C D E
- \_\_\_\_ 13. Have you been continuously irritable or having outbursts of anger?..... A B C D E
- \_\_\_\_ 14. Have you been having persistent difficulty concentrating?..... A B C D E
- \_\_\_\_ 15. Are you overtly alert (checking to see who is around you) since the event?..... A B C D E
- \_\_\_\_ 16. Have you been jumpier, more easily startled, since the event?..... A B C D E
- \_\_\_\_ 17. Have you been having intense PHYSICAL reactions (for example: sweating, heart beating fast) when reminded of the event(s)?..... A B C D E

*Scoring for MPSS-SR*

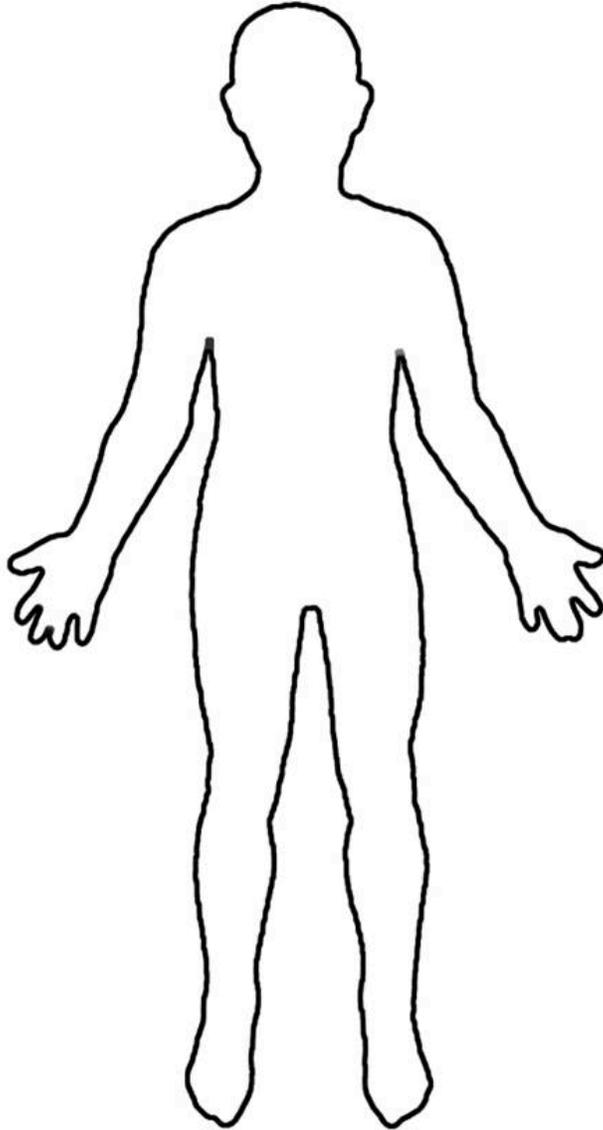
*Frequency scores for each item range from 0-3.  
Severity scores are on a 5 point scale with A=0, B=1, C=2, D=3, E= 4.*

*Sum all frequency and severity scores for a total score.*

## **APPENDIX B: JOURNAL TEMPLATES**

## BODY JOURNAL

*Schedule: Fill this in 2 days after treatment, noting any body sensations.*



## PAIN JOURNAL

*Schedule: Fill this in every evening.*

**Saturday**

At its best today, the pain was a \_\_\_\_ /10

At its worst today, the pain was a \_\_\_\_ /10

Location of Pain:

**Sunday**

At its best today, the pain was a \_\_\_\_ /10

At its worst today, the pain was a \_\_\_\_ /10

Location of Pain:

**Monday**

At its best today, the pain was a \_\_\_\_ /10

At its worst today, the pain was a \_\_\_\_ /10

Location of Pain:

**Tuesday**

At its best today, the pain was a \_\_\_\_ /10

At its worst today, the pain was a \_\_\_\_ /10

Location of Pain:

**Wednesday**

At its best today, the pain was a \_\_\_\_ /10

At its worst today, the pain was a \_\_\_\_ /10

Location of Pain:

**Thursday**

At its best today, the pain was a \_\_\_\_ /10

At its worst today, the pain was a \_\_\_\_ /10

Location of Pain:

**Friday**

At its best today, the pain was a \_\_\_\_ /10

At its worst today, the pain was a \_\_\_\_ /10

Location of Pain:

## SLEEP JOURNAL

*Schedule: Fill this in every morning.*

*Record times to the nearest quarter hour: for example, 10:36pm would be recorded as 10:30pm.*

*Rate the quality of your sleep from 1-5. (1 = very poor; 2 = poor; 3 = fair, 4 = good, 5 = very good)*

	SATURDAY	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b># OF CAFFEINATED DRINKS</b>	Morning: Afternoon: Evening:						
<b>BEDTIME</b>							
<b>WAKETIME</b> (the next day)							
<b># OF TIMES YOU WOKE UP DURING THE NIGHT</b>							
<b>QUALITY OF SLEEP (1-5)</b>							
<b>NOTES</b>							

## **APPENDIX C: TREATMENT SUMMARIES**

### Abbreviations used:

Ant. = anterior  
AROM = active range of motion  
BL = bilateral  
Gluts = gluteal muscles  
ITB = iliotibial band  
L = left  
L/S = lumbar spine  
LBk = lower back  
Lev scap. = levator scapula  
Lwr = lower  
MFR = myofascial release  
Post. = posterior  
PROM = passive range of motion  
Pt. = patient  
QL = quadratus lumborum  
T/S = thoracic spine  
Tib ant. = tibialis anterior  
Gentle TPR = trigger point release  
WBdy = whole body

### **Treatment 1: March 8, 2013**

- Baseline assessment: intake interview and PTSD Symptom Self Report Scale (MPSS-SR)
- Discussed possible treatment techniques and positioning options, encouraging the patient to feel comfortable expressing preferences and needs.
- Pressure scale of 1-5 was introduced (1 = a light, feathery touch; 2 = relaxation level of pressure; 3 = therapeutic pressure; 4 = “good pain” – some discomfort or pain that you can breath through; 5 = “bad pain” that you can’t breath through, or you would like the treatment to stop.)
- Established an understanding that the patient can change or stop the treatment at anytime.

#### **I.) Pre-treatment: Patient comments**

“My whole life is stress. I will never be who I want to be. I’m retired from life. I lost my world, but I have to live. I feel like there’s a punishment waiting for me all the time.”

Pt. request for tx: left side of body.

#### **II.) Treatment Details**

R Side-lying.

Heat: LBk.

Light static contact on L/S and upp. T/S with diaphragmatic breathing.

Gentle compressions: L side of body.

Light circular stroking: WBk.

Slow stroke back massage: from upp. T/S to sacral area.

Muscle squeezing and kneading: upp. trapezius.

Kneading: L upp. pectoralis major.

PROM: L arm.

Compressions: L leg and BL feet.

Kneading palms of the hand with lotion, and gentle distraction of phalanges 1-5.

Gentle kneading: L/S erectors; QL BL.

Effleurage: WBk.

Light static contact on L/S and upp. T/S with diaphragmatic breathing.

#### *Homecare Options:*

- Epsom salt bath in the evening. 39 C/102 F (or comfortable bath temperature), for up to 20 minutes, if desired.
- Journals: body journal, sleep journal, pain journal.

### **III.) Post-treatment: Patient comments**

“I felt I am safe here. My body is safe. I felt like I had a family around me.”

Pt. commented on increased awareness of pain sensations in her mid back, neck and shoulders and right hand. She notes that tensions in her chest feel ‘clearer’.

Pt. particularly enjoyed tx of fingers, ankles and feet:

“It’s like when the mother touches the baby: I feel a peace inside that I never felt before”. She noted that during the circular effleurage on the back she felt “calm, peaceful and quiet.”

“I felt my body in a new way. Thank you so much.”

March 11, 2013 phone communication with pt.

“[After the tx] I felt light as a feather! Walking to the skytrain I didn’t even notice the people. But now my mind is running in circles.”  
Recommended diaphragmatic breathing exercise.

March 14, 2013 phone communication with RN

Pt’s Doctor/Psychologist has requested that no homecare be given that involves ‘mental work’ as this was triggering the Pt.’s symptoms (increased agitation and voices). Agreed to discontinue journals given in treatment 1, and focus on verbal feedback pre and post treatment.

The Doctor prescribed a new medication: Quetiapine, 25 mg (1/2 tab to 1 ½ tabs before bed)

## **Treatment 2: March 16, 2013**

Pt. says she is sleeping much better with change in medication.

### **I. Pre-treatment: Patient comments**

Pt. request for tx: neck, back, ankles, feet.

Pt. is interested in trying tx in prone position.

Discussed option for sleeping position: side-lying with a pillow between the knees, and another pillow to drape the top arm over, creating more space across the anterior chest.

### **II. Treatment Details**

#### Prone

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

Slow stroke back massage.

MFR: upp. trapezius.

Gentle TPR: BL lev scap.

Kneading: post. neck.

#### Side-lying

Kneading: erectors, QL.

MFR: drawing L/S level erectors laterally.

(Pt. noted that she saw a man and woman when she closed her eyes).

Light circular stroking: WBk.

#### Supine

Light stroking proximal to distal: BL lwr. legs.

Compressions: BL feet.

PROM: BL ankles.

Static contact: BL ankles with diaphragmatic breathing and visualization (healing yellow light streaming in through soles of feet. "You are safe. You are grounded.")

#### *Homecare Options:*

- shoulder rolls with breath, 10x (or until fatigue), 3x/day.
- Inhale: roll your shoulders forward and up towards the ears.
- Exhale: roll your shoulders back and down, away from the ears.

- Pt. asked about exercises. Suggested exercise for gentle opening of the chest: lie supine on your bed with a pillow lengthwise under the spine. Soles of the feet are on the bed, with the knees bent. Open arms out to side, take deep breaths. 10-15 mins, 1x/day.

### **III.) Post-treatment: Patient comments**

Pt. notes that she felt some inter-scapular pain sensation, as well as some 'opening' around C6-7.

"I feel like a young woman again! My neck and shoulders feel very good. As I am walking I can feel every muscle is alive! Usually I am afraid to move my neck and back – they usually feel dead – but now I feel they are alive and happy! I can still feel as if your fingers are there. Really, I feel different. Very good!"

March 22, 2013: Phone conversation with pt.

Pt. relayed that she had met with her psychologist and nurse today and told them that she was happy with the massage. "Really I feel a difference in my body and emotions. They are so happy for me! I told them that you are so good with me. Very kind and gentle. It's the first time anyone has ever cared about my body."

### **Treatment 3: March 20, 2013**

#### **I. Pre-treatment: Patient comments**

“[After the last treatment] my back felt very well. I felt like a bird”.

“When you start the massage I feel calm.”

Pt. is feeling low energy from medications.

Pt. request for tx: back, post. thighs, neck.

#### **II. Treatment Details**

##### Prone

Heat: LBk.

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

Slow stroke back massage.

MFR: upp. trapezius.

Gentle TPR: BL lev scap.

Kneading: post. neck.

Picking up: BL post. thighs and calves.

Kneading: BL feet.

##### Supine

Light stroking proximal to distal: BL legs.

Compressions: BL feet

Static contact: BL ankles with visualization: (healing yellow light streaming in through soles of feet. “You are safe. You are grounded.”)

##### *Homecare Options:*

- Try homecare from last week with a folded blanket along the length of the spine instead of a pillow.

#### **III.) Post-treatment: Patient comments**

“My heart feels warm. I am happy. I feel safe. My heart is beating slowly. There is a peace inside my body. [I feel that] I am alright. I am okay.”

“When I feel pain in my body, I think ‘don’t be afraid – someone is here who cares about you.’”

## Treatment 4: March 27, 2013

### **I. Pre-treatment: Patient comments**

“Doctors ask me questions that remind me of my problems, but you let me forget my problems. I feel calm and quiet inside. I feel a change inside with you. Something very good. It gives me something happy in my body. My body feels no pain when you are finished the massage. The pain disappears! I am a young woman! I’m allright. I’m not sick. I like this feeling so much. I want to keep this feeling.”

Pt. request for tx: LBk, L leg, BL upp. chest, neck.

### **II. Treatment Details**

#### Side-lying

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

Slow stroke back massage.

MFR: L erectors – laterally.

Kneading: BL QL (checked in with pt. and used deeper pressure).

MFR: shearing away from L greater trochanter.

MFR (squeezing, lifting, twisting): lateral L gluts, ITB and L vastus lateralis.

MFR (squeezing, lifting, twisting): gastrocs.

(Pt.: “Jenn I am happy... very happy”.)

Kneading: L foot.

Light stroking: proximal to distal entire L leg.

#### Supine

MFR and kneading: upp. pectoralis major.

Kneading: upp. trapezius and post. neck.

(Pt.: “I feel so happy. I want to keep this feeling”.)

Static contact: upp. trapezius.

#### *Homecare Options:*

- Pt. feels some physical discomfort with previous homecare. Option given to lie supine with feet and lwr. legs resting on a stack of pillows or blankets instead. Open arms up to T-position (90 degrees abduction), take slow deep breaths. 10 minutes, 1x/day.

### **III.) Post-treatment: Patient comments**

“I feel very well, especially in my heart. I told [my psychologist] that I feel free. I am free in my feeling. When I go to the Doctor’s office I feel sick/bad, but when I come for massage I feel something completely different. Something inside my body feels free.”

## **Treatment 5: April 3, 2013**

### **I. Pre-treatment: Patient comments**

Pt. felt great the day of the tx, but felt low energy the day after.

“Some bad memories are coming back. My heart was beating fast and I felt sad. I tried to lift myself out of this feeling. I can’t help my soul to forget these things. You are so good to me but you are one small piece inside my body. I have many painful things inside my soul. I feel it very deeply inside me, like a storm. Very dark.”

We spoke about her psychologist’s recommendations to attend some English conversation groups and the value of social connections and support. Pt. also talked about the difficulties of living by herself with no family to help her.

Pt. request for tx: BL upp. trapezius; LBk; BL feet.

### **II. Treatment Details**

#### Prone:

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

Slow stroke back massage.

Kneading of upp. trapezius, lwr back, post. arms/forearms and hands (including gentle distraction of phalanges 1-5).

#### Supine:

PROM: BL arms.

Passive stretch: pectoralis major BL.

Static contact: BL ankles with diaphragmatic breathing exercise (see today’s homecare).

#### *Homecare Options:*

- Breathing exercise when feeling stress:
  - Take three slow, deep, relaxed breaths.
  - As you inhale, think of the word “peace” or “calm”.
  - As you exhale, think of the words “I am ok” or “I am safe”.(Or choose words that work for you.)

### **III.) Post-treatment: Patient comments**

“I feel very relaxed. I could fall asleep.”

## **Treatment 6: April 6, 2013**

### **I. Pre-treatment: Patient comments**

Pt. had a positive response to the breathing exercise from last treatment.

“Sometimes I feel anxious at night; the movies and photos start at night [visual disturbances and voices]. With the breathing [homecare] my heart felt open and alive. It was good for my mind and my heart. The nighttime is the hardest. It’s like a cage in my mind. But these exercises helped me. I also focus on colours like pink, yellow, white, green, blue.”

Discussed the patient’s colour visualization and the positive effects she felt. Encouraged patient to continue this exercise. Suggested that pt. could also try visualizing peaceful places, like walking on the beach, if desired.

Pt. request for tx: back, legs, feet.

### **II. Treatment Details**

#### Prone

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

Slow stroke back massage.

Compressions: Wbdy – post.

MFR: upp. traps and lev scap.

Kneading: post. BL arms

Light, slow stroking proximal to distal: BL arms

Kneading: BL erectors

Gentle TPR: BL QL

MFR: lifting and sheating of lateral gluts - away from trochanter

Kneading and lifting: post. legs.

Kneading: BL feet.

#### Supine

Kneading: tib ant.

Joint mobs: BL feet.

- (dorsal and palmar glides, metatarsals 2-5 BL)

- (varous mobilization 1<sup>st</sup> metatarsal BL)

Static contact: BL ankles

#### *Homecare Options:*

- Continue homecare from previous tx.

### **III.) Post-treatment: Patient comments**

“You are a specialist! You are really magic. You know exactly what my body needs. I feel so happy. I love my body: we are friends now! I feel like my body could be normal one day. The pain left me. I usually carry it every minute.”

“Sometimes I tighten my body – I feel small but safe. Today I feel something beautiful in my body. I let my body open and feel big. My body has a freedom! I felt safe because you are with me.”

*[start of month long break]*

## **Treatment 7: May 8, 2013**

- Reassessment: PTSD Symptom Scale Self Report (MPSS-SR)

### **I. Pre-treatment: Patient comments**

Pt relayed that in the past month she spent some time going for walks, sitting on the benches, and watching children and teenagers play.

“I’ve been sleeping all right. Medications make my mind empty at night. Last time, I really felt better [after the last] massage. I discovered a change in my feelings. I felt safe and friendly. I need this warm feeling; that someone is looking after me. Something I’ve never felt before. I was completely alone before. You really care. This place [the student massage clinic] is different – it is far from my home, no one knows me – I like this. I like that it does not feel like the hospital.”

Sometimes I can’t breathe. I am stuck inside a circle [of thoughts and emotions].”

“I asked [my psychologist] about other activities that can help me feel this way. I know you can’t see me everyday! Massage has opened my mind to other activities I might like. When I come for massage I feel like ‘I did something special today! I am a new person! I am like others.’ I love to come here. It makes my mind open. Just thinking about you and the massage makes me happy. That feeling of happiness doesn’t come easy for me. I want to feel this all the time, not just with you. I leave so happy; I forget the past. I think there are some other things that could give me this feeling. Two to three days after the massage I forget this feeling. And then I look forward to the next appointment. I trust you. You really try to help me and I can feel it.”

Pt. request for tx: shoulders, upp. chest and lwr back.

### **II. Treatment Details**

#### Prone

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

Compressions: WBdy.

Slow stroke back massage.

Light, circular touch: WBk.

Kneading: BL upp. trapezius, BL rhomboids, BL triceps.

Standing at pt’s head mobilizing upp. trapezius and scapula inferiorly, BL.

Compressions and palmar stroking: BL erectors.

### Supine

Kneading: upp. pectoralis major (with diaphragmatic breathing).

PROM: BL arms.

Gentle passive stretch: pectoralis major.

Static contact: BL ankles with diaphragmatic breathing.

(Inhale – “peace”; exhale – “I am okay”).

During tx of lwr. back: “Your hands communicate with my body – they talk to the pain and it answers. Your hands know exactly what my body wants.”

### *Homecare Options:*

Reviewed exercises given by patient’s urologist and suggested a chair adaptation:

- Isotonic quadriceps exercises (seated in a firm chair)
  - 5 reps each leg (or until fatigue), 1x/day.
  - Extend the lower leg (lifting the sole of the foot off the floor, until the whole leg from hip to ankle is in a straight line; exhale, lower the sole of the foot back to the floor). Alternate with the other leg.
  
- Sun-breaths: 5 sets, 1x/day
  - Arms lift through the coronal plane all the way up to 180 degrees where the palms of the hands touch; exhale, arms float back down following the same plane of movement.

## Treatment 8: May 14, 2013

### **I. Pre-treatment: Patient comments**

“You believe in me and help me. I feel a new sense of hope. You, [my psychologist], and [my Social Worker], help me to make little steps. You are the first person in Canada that helped me to feel hope. The massage is something I look forward to. When I see you, I feel better. [My psychologist], is trying to help me find something else I can do that brings me this good feeling. Here in this massage clinic, something changed inside me for the better.”

“[When you massage me] it feels like when the mother touches the baby – nurturing and caring.”

“You let me pray, give me water. You are so kind to me. I have these memories of you now. I lost love a long time ago from my life. But you help me feel hope again.”

“I felt I was weak and couldn’t make decisions in my life before. But I made a choice to come for massage and I love massage! I made a good decision.”

Review of homecare exercises.

Pt. request for tx: Back, legs, neck, stretch - pectoralis major.

### **II. Treatment Details**

#### Prone

Heat: LBk.

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

WBdy compressions.

Slow stroke back massage.

Kneading: upp. trapezius, post. neck.

#### Supine

Kneading: upp. pectoralis major (with diaphragmatic breathing).

PROM: BL arms.

Gentle passive stretch: pectoralis major.

Static contact: BL ankles with diaphragmatic breathing.

#### *Homecare Options:*

- continue sun-breaths and isotonic quad exercises.
- add shoulder rolls (as described in treatment 2)

## Treatment 9: May 22, 2013

### **I. Pre-treatment: Patient comments**

Pt. has been doing 10 sun-breaths and three quadriceps isotonic repetitions everyday.

Reviewed previous three homecare exercises together.

“I used to be so disconnected from my body. You help me to take care of it and do good things for myself.”

The Pt. has been talking with her psychologist about the idea of volunteering with children, and feels positively about it. Pt. and doctor agree to bring urinary continence issues under control before starting a volunteer program.

Pt. request for tx: WBdy. Anterior thighs are a bit sore from exercises.

### **II. Treatment Details**

#### Sidelying

Heat: LBk.

Light static contact on L/S and upp. T/S; diaphragmatic breathing cued.

Kneading (palmar and fingertip): BL upp. trapezius, post. neck including suboccipitals, BL erectors, BL QL.

#### Supine

Kneading and muscle squeezing: BL upp. trapezius.

Kneading and picking up: BL quadriceps.

Kneading: tib ant., BL feet.

Joint mobilization: BL 1<sup>st</sup> metatarsal – varous.

PROM: BL arms.

Passive and active stretch: BL pectoralis major.

#### *Homecare Options:*

- Continue homecare from last tx.
- Add: stretch for pectoralis major 1x/day (wall stretch, two positions to target upp. and lwr. fibres.)
  - Hold 30-60 seconds with diaphragmatic breathing. BL.

## Treatment 10: May 29, 2013

### **I. Pre-treatment: Patient comments**

“You let me be free from my cage. I love this feeling. A break from my negative thoughts and feelings.”

Regarding the sun-breath exercise: “I love these! When I do them I feel young!”

Practiced homecare exercises together and fine-tuned movements.

Discussed options for sleeping positions such as supine with pillows or blankets under knees and lwr. legs.

Pt. request for tx: LBk and pectoralis major.

### **II. Treatment Details**

#### L Sidelying

Heat: LBk.

Light static contact on R middle deltoid fibers and R lateral ribs. Diaphragmatic breathing cued.

Compressions: WBk; R lateral thigh and lwr leg.

Kneading (palmar and fingertip): upp. trapezius; lev scap. attachment.

Heat: R upp. pectoralis major.

MFR: R erectors – lateral.

Kneading (fingertip and thumb): R QL; along iliac crest.

#### R sidelying

Heat: L upp. pectoralis major.

MFR: L erectors – lateral.

Kneading (fingertip and thumb): L QL; along iliac crest.

Static contact: LBk. BL.

Light circular stroking: WBk.

#### Supine

Heat: R upp. pectoralis major.

Kneading: L upp. pectoralis major.

PROM: L arm.

Passive stretch (with kneading around tendon): pectoralis major.

Kneading: R upp. pectoralis major.

PROM: R arm.

Passive stretch (with kneading around tendon): pectoralis major.

Fingertip kneading and muscle squeezing: R arm and forearm.

Kneading: Entire R hand.

Gentle distraction: all phalangeal joints - R hand.  
Kneading: BL feet.  
Joint mobilization: BL 1<sup>st</sup> metatarsal – varous.

*Homecare Options:*

- Option to continue previous exercises.

Pt. asked about strengthening adductor muscles.

- Isotonic adductor exercise (seated):
- Place a rolled up towel or small pillow between the knees. Squeeze the towel/pillow with the knees 10 reps (or until fatigue), 1x/day.

**APPENDIX D: NOTES FROM PATIENT'S FILE**