Pain Clinic Education Session
Understanding Pain and Self-Management

Best Practice for Pain Management involves a multi-faceted approach, which includes medical advice/treatment, managing factors that contribute to pain and self-pain management.

Self-management is about taking an active approach to dealing with your pain:
- Being involved with understanding your medical options, monitoring response to medications, being open-minded to try new things to manage pain (self-management strategies);
- Recognizing factors that contribute to your pain ("pain triggers"); and
- Making changes within your control that will minimize contributing factors and have a positive influence on your life (decrease pain, improve mood, improve sleep, improve relationships).

Pain:
- Is part of a system that protects us – “Pain Alarm System”
- Can warn you when you are approaching damage, have been damaged, or are in a similar situation where you experienced pain
- Can come from a physical problem or our mood and emotions
- Is influenced by context, other body systems and previous experiences

How pain is produced:
- Information from the body is detected by sensors on nerves
- Nerves carry information to the spinal cord and the spinal cord takes the information to the brain; it can prioritize information or stop it from passing through to the brain
- The brain processes the information from the body and other relevant information (past experience, context, mood, other body systems) to produce the experience of pain
- Example: the pain experience from a bee sting will be different for a beekeeper versus someone who is afraid of bees

The “Pain Alarm System” doesn’t always act as we expect:
- Sometimes people have can experience very little pain despite a significant injury (e.g. soldier in life or death situation, athlete in intense competition)
- Sometimes there is pain without cause (e.g. phantom limb pain with an amputation)
- More pain does not always equal more tissue damage
Pain can be influenced by many factors. Things that can increase pain...

<table>
<thead>
<tr>
<th></th>
<th>Things that can Increase pain</th>
<th>Things that can Decrease pain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td>Doing too much, doing too little</td>
<td>Doing the right amount with pacing strategies</td>
</tr>
<tr>
<td><strong>Mood</strong></td>
<td>Depression, stress, anxiety, fear, negative emotions</td>
<td>Managing mood, doing enjoyable/&quot;emotionally nourishing&quot; activities, laughter/joy, being compassionate with yourself</td>
</tr>
<tr>
<td><strong>Beliefs</strong></td>
<td>&quot;I will never get better&quot;, &quot;there's nothing I can do&quot;</td>
<td>&quot;I can learn to manage my pain and live a full life&quot;</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Weather, site of injury</td>
<td>Choose positive environments whenever possible and use mindfulness and self-reassurance when not possible</td>
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<tr>
<td><strong>Immune system</strong></td>
<td>Over active immune system (e.g. fighting off flu, immune compromised)</td>
<td>Boost your immune system with eating well, proper sleep, laughter, exercise and enjoyable activity</td>
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<td><strong>Hormone/Endocrine System</strong></td>
<td>Monthly fluctuations, poor insulin control, constant stress</td>
<td>Understand cause and manage each one accordingly. Use self-reassurance that it is temporary and your condition is not worsening</td>
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<tr>
<td><strong>Sleep</strong></td>
<td>Poor quality sleep</td>
<td>Good quality sleep – see sleep Do's and Don'ts; consider consulting with your MD for further guidance</td>
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Neuroplasticity = the ability of the nervous system to change. It adapts based on the situation with the primary goal of protecting you. The nervous system can increase sensitivity, which leads to more pain; BUT it can also decrease sensitivity and less pain.

**Chronic or “Persistent” Pain**

- Often begins with an acute injury or illness
- But then pain that lasts longer than the normal time for healing (3-6 months)
- It is associated more with adaptation/changes in the nervous system than with ongoing tissue damage; this process is called Central Sensitization

**Central Sensitization**

**Symptoms:**

- Pain can feel more intense than expected, like it’s getting worse or spreading
- Spontaneous pain, shock/electrical-like pain, numbness/tingling, unpleasant sensations (crawling, itchiness)
- Difficulty using muscles (decreased strength, giving out, poor coordination)
- Inflammation, redness or swelling without an acute injury

**Mechanism:**

- Increased number of sensors and sensitivity of sensors on nerve endings
- Spinal cord neurons do not inhibit information coming from the body and release chemicals to increase sensor production and sensitivity
- Brain receives amplified information from the body, becomes more activated and reactive, releases chemicals increase sensitivity and produces a stronger experience of pain
Pain Self-Management:

You can decrease your level of sensitivity and pain by:

- Managing contributions from other body systems
  - work to decrease stress/anxiety and get good quality sleep
  - manage depression with anti-depressants, laughter, enjoyable activity
- Self-Management Techniques help to release endorphins, our body’s natural opioids. Endorphins are powerful chemicals to block pain and improve mood without the unpleasant side-effects of medications
  - Breathing
  - Body Awareness
  - Exercise
  - Repetitive Movement
  - Meaningful Activity
  - Positive Distraction
  - Creative Activity
  - Mindfulness
  - Pacing and Planning
  - Setting Goals
- Frequent practice helps the nervous system learn and get used to new things
  - Sensors are replaced every 3-4 days. Create the best environment possible so that new sensors are less sensitive
  - Practice your favorite self-management techniques for a few minutes several times per day as part of your self-care routine
- Ask yourself… “Is this really dangerous”
  - Use reassuring, positive self-talk to calm the nervous system and decrease over-reaction to activities or situations
- It takes – Patience, Practice, Persistence and Compassion with yourself
Moving With Pain

Exercise and activity is very important – science shows it promotes chemistry in your nervous system to promote change and decrease sensitivity/pain. As pain increases, sometimes we avoid movement and activity to avoid increasing pain. Unfortunately, this can lead to secondary muscular pain associated with deconditioning, so finding a way to exercise in a way that does not activate pain is important.

Benefits of Exercise and Physical Activity...

- Increases natural pain killers (endorphins) to help control pain
- Increases cardiovascular system, endurance and stamina
- Increases muscle strength, flexibility, balance and co-ordination
- Helps to improve quality of sleep, reduces fatigue and increases energy level
- Reduces muscular tension and stress
- Helps combat depression/anxiety and maintain a positive outlook
- Helps to prevent constipation and with weight control
- Can be sociable

Exercise Principles for Chronic/Persistent Pain

- Find your baseline - the right amount of activity without increasing pain, be conservative at first
- Move to the "edge" of pain or sensation of muscular stretch/fatigue
  - Maintain calm even breathing, keep body tension low, monitor pain without reacting negatively
  - Ease off if you are not feeling safe or feel like you will "pay for it later"
- Challenge yourself and build slowly
  - Over time, try a little more while maintaining your breathing
  - Increasing by a few minutes or 5-10% more per week is sufficient
- Repetition and daily practice is important
  - It's better to do a little every day or a little a few times per day than to do one big/long session
  - e.g. walk for 10 minutes 3 times per day instead of 30 minutes all at once, you get the same physical benefits but potentially without increasing pain

Excellent Ways to Exercise with Chronic/Persistent Pain

- Mindful based, slow movement that incorporates breathing (e.g. Tai Chi, yoga, pilates, Feldenkrais)
- Repetitive/rhythmical movement, cardiovascular exercise or warm water-based exercise
- Choose activities that you want to do, that you enjoy, is convenient/that you can do regularly and demands your attention
- Get moving with friends or a small group; consider indoor walking programs or classes at your community center
- Use positive distraction while you exercise, like music or enjoying being in nature
- Give yourself a reward for being committed to your exercise, activity, health & well-being
Self-Management strategies have the ability to release endorphins to decrease pain and improve mood. You can use these strategies as a pain flare-up but practicing them daily improves their effectiveness. You can incorporate them into daily activity and exercise or focus on them in a resting position.

**Breathing**

- Breathing is healthy and normal activity for the nervous system.
- It releases endorphins and winds down the nervous system.
- “Tells the alarm system that you hear it and that you are okay”
- Decreases blood pressure, heart rate, muscle tension, pain, stress and anxiety
- Example: start by observing your breath and slowly try to lengthen it you inhale/exhale; when you are comfortable with a slower breath try to deepen it with expanding the lungs fully (lower belly, middle ribcage, upper chest)
- There are many online resources for breathing exercises, some good apps include: “Breathe” and “Head space”

**Body Awareness**

- When in pain, the sense of where the body is in space is often decreased
- Exercise and normal movement can improve body awareness
- “Body scan” can also help reconnect to normal body sensation
- The idea is to listen to your body more than you listen to the pain

**Distraction**

- Distraction is a powerful tool to complete activity and manage pain flare-ups
- You need to pay enough attention to your body to know when the “pain alarm” is sounding, but you do not need to attend to every sensation
- Positive ways to distract include: favourite music or video game, Positive memories, looking at photos, talking with a friend

**Visualization**

- Sometimes pain happens with just the idea of doing a certain movement. Visualization can change your nervous system to improve your physical performance and decrease pain reactivity or over protective body responses (like muscle spasm or tension)
- Imagine doing the movement with activity, repeat it frequently and use breathing and reassuring self-talk to teach the nervous system it is okay

**Positive Self Talk and Reassurance**

- How we talk to ourselves is very important; watch the “stories” and don’t get carries away with negativity and catastrophization. Ask yourself “how dangerous is this”
- Consider a mantra – repeating simple, reassuring works over and over (e.g. “I am safe, this is okay”, “I am strong, I can get through this”)
PRIORITIZING

A healthy lifestyle includes productive (paid or unpaid), leisure (play) and self-care activities. Participating in these 3 types of activities on a regular basis helps you feel that you are leading a meaningful life. When we spend too much time in only one of these activity categories, we feel stuck and out of balance.

On a blank piece of paper, make a list of all the activities you do. Now separate them under the 3 categories of productive, leisure and self-care activities. Are you satisfied with the amount of time you are spending in each category? Balancing out your lifestyle means going beyond doing the things you have to do and intentionally adding activities that bring you joy, even if it’s just 10 minutes/day.

Ask yourself: What are my priorities? What makes life meaningful for me?

My answer(s):________________________________________________________________________________

Many people with chronic pain leave leisure activities out of their schedule. They also tend to follow a push-crash activity cycle. The problem is that every time you overdo it, you are ramping up your nervous system and reinforcing the pain cycle.

PACING

- Can be used every day while participating in any activity.
- Involves regularly visiting or nudging your symptom onset line (your tolerance), briefly lingering there, then pulling back to your safety zone.
- Your tolerances will change daily; start low and go slow.
- Your tolerance relates to the time and intensity you can participate in an activity before you start to notice an increase in symptoms.
- Consider a pacing strategy that will work for you, for example: oven timer, electronic device alarm, Ready-Set-Go system, Parkwood Pacing Points system.

PLANNING

- Your nervous system loves predictability and routine!
- Regularly sit quietly to write out a daily, weekly, and/or monthly activity plan.
- Spread out your heavy, medium and light tasks with regular rest breaks in between.
- Consider the physical, emotional and mental demands of your daily activities.
- Build flexibility into your plan. Approach yourself with gentleness and compassion.
- Reflect on your plan at the end of the day. Learn from it and make adjustments.
- Consider the 4 Ds when planning your activities: DO, DELEGATE, DEFER or DELETE.
- Write out your bad day plan or make a “comfort basket”. Include non-negotiable tasks such as light exercise, relaxation and healthy eating.
GOAL SETTING

Regularly setting SMART goals is motivating and helps you focus your energy on the activities that are most important to you.

S – Specific (who, what, when, where?)
M – Measurable (how much or how many times?)
A – Achievable (is this a realistic goal?)
R – Relevant (does this goal matter to you?)
T – Time limited (deadline for completion)

Remember to Evaluate (reflect) and Revise (make adjustments as required) to make your goal even SMARTER.

My SMART goal for this week: ________________________________

A HEALTHY NERVOUS SYSTEM STARTS WITH A HEALTHY LIFESTYLE

- Be mindful of your stress levels. Use at least 1 relaxation technique every day.
- Safe movement daily. Turn your favourite music on for stretching inspiration!
- Optimize your sleeping habits and your sleeping environment.
- Laughter is very calming to the nervous system. Watch funny movies or videos and read uplifting material. Stay away from dark/depressing media! For a healthier outlook, check out www.sunnyskyz.com or www.positive.news.
- Smoking is harmful to the nervous system. It interferes with good blood circulation that healing tissues require.
- What you put in your mouth can also be a stressor:
  - Ensure adequate hydration with clear fluids.
  - Eat a balanced diet with fruits, vegetables, lean proteins and whole grains.
  - Spend more time in the outside aisles at the grocery store.
  - Stay away from caffeine, alcohol, aspartame and MSG.
  - Avoid refined sugar and processed foods.
  - Anti-inflammatory foods include green vegetables, berries, salmon, nuts and seeds, turmeric and coconut oil.
  - Helpful supplements may include vitamin D (1000 IU/day), calcium (500mg/day), omega 3s (500 mg/day) and magnesium (400mg/day). Review supplements with your doctor to ensure they are right for you.
Mental Health & Chronic Pain
Resources and Tips

Pain and mental health are intricately connected. However, it is possible to live a meaningful life with chronic pain. In the following some tips and resources are provided for the most common mental health difficulties individuals with chronic pain tend to report.

Sleep and Insomnia Difficulties

The DO’s

• Maintain a regular schedule
• Establish a regular bedtime routine
• Create a sleep conducive environment
• Dark, comfortable, cool, and free of distractions
• Use your bed for sleep and intimacy only
• Exercise a few hours before going to bed
• Get out of bed if you can’t get to sleep within a reasonable time period (20-30 min.)

The DONT’s

• Engage in stimulating activities right before bed
• Eat a large meal close to bedtime
• Drink caffeine before going to bed
• Consume alcohol close to bedtime
• Take late naps

Anxiety

Anxiety can feel overwhelming at times and therefore it can be helpful to break it down into three, modifiable components: 1) anxious thoughts (catastrophic “what if” scenarios); 2) anxious physical sensations (tension, quick and shallow breathing); and 3) anxious behaviours (avoiding activities and things that create anxiety, procrastinating). Two simple ways to reduce anxiety are:

1) Reducing physical tension through:

• Relaxation training
• Mindfulness
• Deep breathing

2) Changing our behaviours by:

• Facing our fears gradually (“baby steps”) to examine whether there is actual danger or cause for alarm
• Increase our activity level, for example by attending an exercise class
Depression

Feeling down and depressed often lead to isolation and a sedentary lifestyle (staying home and doing little), which in turn can create self-blame and more depression. Here are some tips to break the vicious cycle of depression:

- Increase activity level
- Establish a routine
- Reconnect with social circle
- Schedule these activities and...GO WITH THE PLAN, NOT WITH THE MOOD! Depression will make you want to stay home and not do these activities; to feel better it is important to push yourself despite low motivation. You might be surprised with how much you enjoy yourself after all.

If these symptoms persist after a few weeks OR if you are experiencing suicidal thoughts:

- Talk to your family doctor as soon as possible
- Contact the Mental Health Line (613-722-6914 or 1-866-996-0991)
- Present to the nearest Emergency Department if you are at imminent risk of hurting yourself on purpose

General resources

Books:

Pain Management

Sleep and Insomnia
- Quiet your Mind & Get to Sleep by Colleen Carney & Rachel Manber (2009). New Harbinger, Oakland, CA.

Mood and Anxiety

Web-Based Resources:

Depression: https://www.mindovermood.com
Anxiety: https://www.anxietybc.com/adults/introduction

Apps:
The Mindfulness App
Headspace
Calm

Psychotherapy:
See psychologists in your area on the College of psychologists of Ontario directory
Catholic Family Services of Ottawa (sliding scale for counseling)
University of Ottawa Centre for psychological services and Research (sliding scale for psychological treatment)
Psychosocial supports, resources & community programs

General information and Walk-ins
- Community Health and Resource centres (www.coalitionottawa.ca)
- 211 (City of Ottawa for social services)
- The Walk-in Counselling Clinic (www.walkincounselling.com)
- http://www.champlainhealthline.ca/

Recreation Subsidies
- YMCA/YWCA Subsidy http://www.ymcaywca.ca/Adults/healthandfitness/vactive-assist/

Algonquin Massage therapy

Dental
- http://probonodental.ca/
- https://www.collegelacite.ca/services#clinique_dentaire

Living Healthy Champlain for support groups on chronic pain. (www.livinghealthychamplain.ca)

Online support group http://www.ontarioselfmanagement.ca/

Registered Dietician
- http://content.loblaws.ca/content/lclonline/en_CA/health-wellness/dietitian.html
- https://www.yourindependentgrocer.ca/dietitians


Disability Tax Credit (DTC) http://www.cra-arc.gc.ca/tax/ndvds/sgmnts/dsblts/dtc/menu-eng.html


Trillium Drug Program (https://www.ontario.ca/page/get-help-high-prescription-drug-costs)


InnoviCares https://www.innovicares.ca/en

Employment Ontario (https://www.ontario.ca/page/employment-ontario)
- March of Dimes https://www.marchofdimes.ca/EN/programs/employment/Pages/default.aspx
- Neil Squire https://www.neilsquire.ca/involved/job-opportunities/

Legal Services
- (http://www.legalaid.on.ca/en/contact/contact.asp?type=cl)
- https://commonlaw.uottawa.ca/community-legal-clinic/
Resources to Understand and Manage Pain

Living Healthy Champlain [https://www.livinghealthychamplain.ca/]

Canadian Institute for the Relief of Pain and Disability [http://www.cirpd.org/]


Canadian Pain Coalition [http://www.canadianpaincoalition.ca/]

Pain Toolkit [http://www.paintoolkit.org/]

Pain BC: Live, Plan, Be [https://www.liveplanbe.ca/]

Pain Relief Revolution [http://painreliefrevolution.com/]

Treatment Options for Pain: Beyond Medications, Surgeries and Injections
[http://www.painbc.ca/sites/default/files/ThePainToolboxFINALJan132012.pdf]

Understand Pain, Live Well Again – Neil Pearson
[http://www.canadianpaincoalition.ca/media/video/overcome_pain/part_1/]
[http://www.canadianpaincoalition.ca/media/video/overcome_pain/part_2/]
[http://www.canadianpaincoalition.ca/media/video/overcome_pain/part_3/]

Treating Pain Using the Brain – David Butler
[https://www.youtube.com/watch?v=4ABAS3tkkuE]

Why things Hurt – Lorimer Moseley
[https://www.youtube.com/watch?v=gwd-wLdIHjs]

A 10-minute Guide to Understanding Pain and What to do About it
Central Sensitization Syndrome, Dr. Sletten Mayo Clinic
https://www.youtube.com/watch?v=8defN4ilbho

How to Turn Down the Volume of Persistent Pain
http://knowpain.co.uk/wp-content/uploads/2014/05/TazzyPersistentPainBooklet.pdf

Understanding the Complexity of Pain – Generation Care
https://www.youtube.com/watch?v=Zv6RPoVZx9M

BOOKS

Explain Pain – Lorimer Moseley and David Butler
Understand Pain, Live Well Again – Neil Pearson
The Pain Truth – Barham Jam
Painful Yarns – Lorimer Moseley
The Mind Body Prescription: Healing the Body, Healing the Pain – Dr. John Sarno
The Brain That Changes Itself: Stories of Triumph from the Frontiers of Brain Science – Norman Doidge

Resources for Exercise with Chronic Pain

Yoga

Life is Now Pain Care http://lifeisnow.ca/pain-care-for-life/
Mindful Chair Yoga: http://www.whitecloudwellness.com/
Chair Yoga Flow for All Levels: http://www.chopra.com/articles/chair-yoga-flow-for-all-levels
Yoga for People in Pain, 5 Part Series: http://www.cirpd.org/Webinars/Pages/Webinar.aspx?wblID=16
Somatic Yoga with James Knight: https://www.youtube.com/user/JamesKnightGYSE

Tai Chi

Top 10 Tai Chi Moves for Beginners: https://www.youtube.com/watch?v=vHBR5MZmEsY
Tai Chi for Beginners, Dr. Paul Lam: https://www.youtube.com/watch?v=hIQHGrYCEJ4
Daily Tai Chi, 8-minute Exercise: https://www.youtube.com/watch?v=PNTWqDxwwMg
Feldenkrais


Feldenkrais with Alfons, Learn Movement Basics: https://www.youtube.com/watch?v=nIE2WMMk-hM

One Minute Feldenkrais Lesson, Robert Spencer: https://www.youtube.com/watch?v=Blqiq7M3qhY

Stand up Without Effort, The Feldenkrais Method: https://www.youtube.com/watch?v=cDURAYq15CI

Aquafitness

Jack Purcell Community Centre Pool (Chronic Pain Swim Mon-Fri 2:25-3pm, Temperature 92°)
http://jpra.ca/programs/chronic-pain/

Dovercourt Pool (Programs for arthritis, fibromyalgia, cancer survivors; Pool 86-88°, Whirlpool 104°)
http://www.dovercourt.org/enterprise/ourpool

City of Ottawa Community Pools

Better Strength, Better Balance Exercise Program, City of Ottawa / Champlain LIHN

This is a beginner level program for those wishing to improve their strength and balance for people 65+. Strong muscles, strong bones and better balance will make you more mobile and less likely to fall.

You are strong enough to participate safely if you can do ALL of the following: stand on one foot for 2 seconds, stand for 20 minutes (e.g. in a grocery line), walk one block (100 meters or 325 feet) without becoming out of breath and needing to sit down, walk up 10 stairs. Classes are unsuitable for people who are very active. Participants attend class twice a week for 12 weeks.

First time participants can register for the next available session at any time. Call Ottawa Public Health at 613-580-6744 (TTY: 613-580-9656).

City of Ottawa Active Sitting Program

Get Moving: Active Sitting Program Multilingual DVD and Manual

This easy to follow 30-minute DVD and user’s guide present physical activity geared for older adults with a low level of activity. Seniors with some physical limitations will also benefit from Get Moving. The program was developed with the expertise of local physiotherapists and a senior’s fitness instructor.

Note: the manual is available in French/English only. Individual copies $12 each.
Available at: The Good Companions (link is external) (613-236-0428) OR at the Centre de services Guigues (613-241-1266). Copies are also available for loan from your local library.
Women Alive Program

The Woman Alive/Femme active Program offers affordable physical activity opportunities to women living on limited income in order to increase their capacity to care for their own health. The Woman Alive Leader's Manual displays how partnerships between two or more agencies can be an excellent method of pooling resources to offer an effective and affordable program. The program also provides the participant with an environment that allows for positive social interactions and cultural sensitivity. If you have questions about the program, please call the location you would like to attend.

- Dempsey Community Centre: 613-247-4846
- Foster Farm Community Centre: 613-828-2004
- Jack Purcell Community Centre: 613-564-1050
- Kanata Leisure Centre: 613-591-9283
- Plant Recreation Centre: 613-232-3000
- Carlington Recreation Centre: 613-798-8919
- Heron Road Community Centre: 613-247-4808

Financial Support – Ottawa Hand in Hand


The City of Ottawa offers help with program fees so that all residents can take part in recreation and culture activities regardless of their ability to pay. If you are already a participant in a community or social service agency program, or if you are an individual or family with a low-income, you may qualify for the Ottawa Hand in Hand recreation and culture fee support program.

To apply for the Ottawa Hand in Hand, Recreation and Culture Fee Support: Get the application form at any recreation facility or at a Client Service Centre. Complete the application form and bring it to your local recreation or cultural facility. A supervisor will review the application for approval.

- Residents are encouraged to apply for the Ottawa Hand in Hand fee support as early as possible before the program registration period. Each qualifying individual, or member of a family, is eligible for an annual amount of fee support ($170 per person).
- Applicants are encouraged to pay a minimum of 25 per cent of the program cost. A parent or guardian can transfer all, or a portion of their Ottawa Hand in Hand fee support entitlement to a child or children in their household.