

Taking the Pain out of Pain Management

Non-Pharmacological Management of Pain

Host and Moderator: Amanda Tevelde

Presenters: Nancy Good-Kennedy, RN

Rachel Lapensee, RN

Date: November 30th, 2023



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Pallium Canada



Land Acknowledgement

We would like to acknowledge that the land which we are gathered on today is the traditional territory of the Anishinaabek Nation; specifically, the Chippewa Tri – Council comprised of the Chippewas of Beausoleil, Rama and Georgina Island First Nations and more recently the Mississaugas of the Credit River First Nation.

Ontario is covered by 46 treaties and other agreements and is home to many Indigenous Nations from across Turtle Island, including the Inuit and the Métis. These treaties and other agreements, including the One Dish with One Spoon Wampum Belt Covenant, are agreements to peaceably share and care for the land and its resources. Other Indigenous Nations, Europeans, and newcomers were invited into this covenant in the spirit of respect, peace, and friendship.

Most of us have come here as settlers, immigrants, or newcomers in this generation or generations past. **We are all Treaty people.** Every day we are mindful of broken covenants, and we strive to make this right. We commit to collaborating based on the foundational assumption that Indigenous Peoples have the power, strength, and competency to develop culturally specific strategies for their communities. We are dedicated to honouring Indigenous self-determination, history, and culture, and are committed to moving forward in the spirit of reconciliation and respect with all First Nation, Métis and Inuit people.

The Palliative Care ECHO Project

The Palliative Care ECHO Project is a 5-year national initiative to cultivate communities of practice and establish continuous professional development among health care providers across Canada who care for patients with life-limiting illness.

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Introductions

Host and Moderator

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Communications, Fundraising and Public Relations Specialist
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Presenters

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Thank you for joining us today!

Please remember to
complete the satisfaction
survey following today's
session.



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Learning Objectives

By the end of the session, participants will be able to:

What is the objective of pain management?

What are the desired outcomes of non-pharmacological pain management?

What non-pharmacological strategies could you implement to help relieve pain?

Why are non-pharmacological interventions important?

OVERVIEW

Overview of Pain



Presenters: Nancy Good-Kennedy, RN, CHPCN(C)

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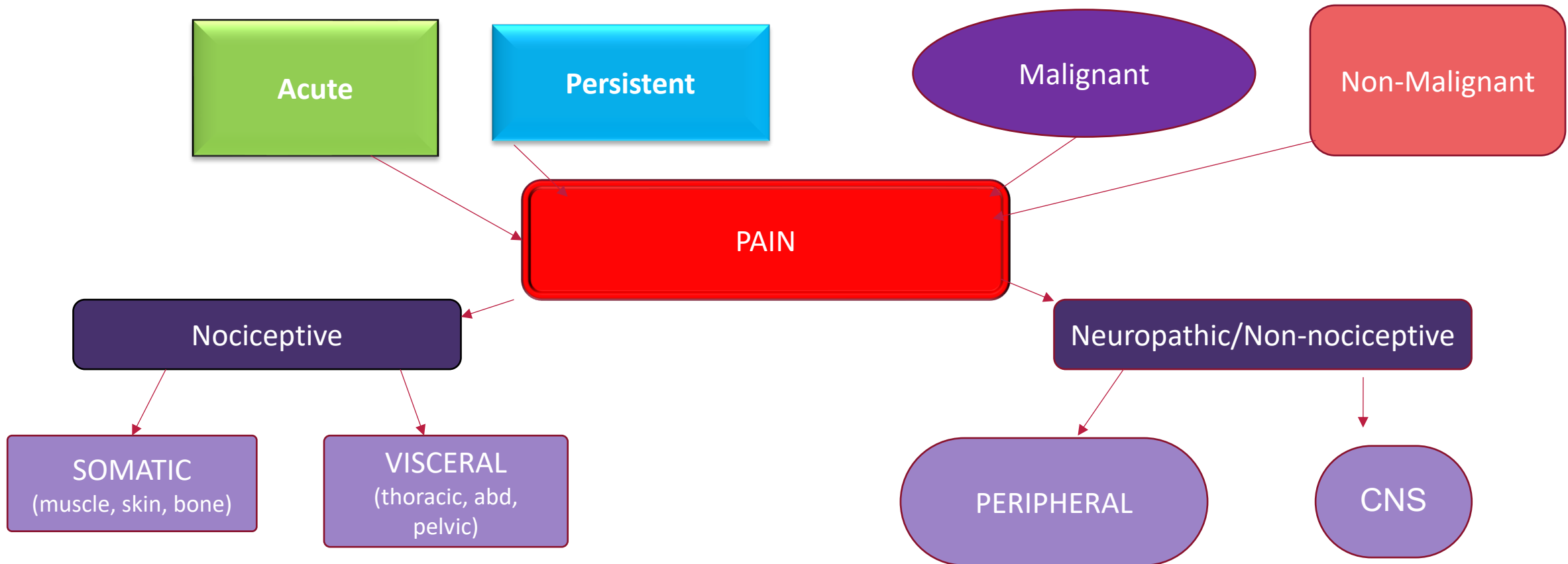
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What is Pain?

"An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage."

(Raja et al., 2020)

Classification of Pain



Types of Pain: A Quick Review

Acute pain: sharp, sudden onset, short duration

Chronic pain: persistent pain, greater than three months, mild or severe, intermittent and or constant, can stay the same or get worse over time.

Breakthrough pain: sudden, intense, short, may occur while taking medicine to manage chronic pain.

Different pain exists in different people.

WHO & WHAT

Pain Management: *Who & What*



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Pain Management – The Team

Some hospitals and clinical settings have doctors who specialize in pain management or palliative care in addition to other specialists.

The team may include:

- Nurse
- Acupuncturist
- Pharmacist
- Surgeon
- Psychiatrist
- Psychologist

Pain Management – The Plan

Full assessment including:

- Description of pain
- Symptoms
- Physical exam
- Imaging tests

This plan usually includes pain control medicine.

The health care team may suggest other interventions that may help such as integrative medicine.

ETIOLOGY

Non-pharmacological Management: *Etiology*



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Etiology of Non-pharmacological Pain Management

“There’s a growing appreciation for the psychosocial aspects of pain,” says Sean Mackey, MD, PhD, an anesthesiologist and director of the division of pain medicine at Stanford. “It’s growing for two reasons: One is just a greater awareness of the psychological factors that play a role in pain. The second is the opioid crisis.”

It’s going to be a tragic benefit of the opioid crisis that it will bring attention to pain psychology.”

(Winerman, L . 2018)

Important to Remember

The evidence is variable for these therapies. These and other integrative medicine practices are available in communities and hospitals. There are also online programs.

For this reason, research on non-pharmacological approaches to pain management is very important, so that patients are provided with information that ensures them the most effective options for treating their pain.

Non-pharmacological Pain Therapy

- Refers to interventions most often called complementary medicine.
- Integrative medicine does not involve the use of medications to treat pain.

Goals:

- Decrease fear
 - Decrease distress
 - Decrease anxiety
 - Reduce pain
 - Restore a sense of control
-
- Complementary and integrative medicine practices focus on the health of the whole person.

These approaches can help to...

- Increase feelings of self-control
- Reduce the feeling of weakness
- Enhance the functional capacity and activity level
- Reduces anxiety and stress
- Decrease the pain behaviour and the focused pain level
- Decrease the dosage of analgesic drugs, subsequently decreasing the negative side effects

METHODS

Non-pharmacological Management: *Methods*



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Complementary Therapies

- Music therapy
 - Acupuncture, reflexology
 - Reiki
 - Aromatherapy
 - Massage
 - Positioning
 - Hot and Cold
 - TENS
 - Distraction
- Relaxation techniques:
 - Biofeedback
 - Guided imagery
 - Meditation
 - Hypnotherapy
 - Breathing exercises

Music Therapy

- Music has been used since ancient times to enhance wellbeing and reduce pain and suffering
- Playing music for patients during or after surgery helps reduce pain and the use of sedatives, anxiolytics, and analgesics
- Elderly patients with chronic osteoarthritis who listened to music daily for twenty minutes reported decreased pain levels as compared to a control group
- One study evaluated the effects of including music therapy on pain report, nausea, in addition to the time to engraftment for patients undergoing bone marrow transplants. Those who received music therapy alongside relaxation imagery experienced lower pain scales, less nausea and faster engraftment rates (El Geziry et al. 2018)

Acupuncture

- Needles are inserted into the skin at specific acupoints to enhance the healing powers of your body.
- Useful for: allergies, anxiety and depression, chronic back, neck, or shoulder pain, hypertension, insomnia, migraines, morning sickness, strokes and menstrual cramps
- This can include heat, pressure, needles may be twirled or moved up and down at different speeds and depths, heated, or charged with a weak electric current.

Acupuncture (continued)

- Scientific studies suggest that it can be beneficial for patients with cancer and multiple sclerosis as well (Richardson 1986).
- Also been shown to relieve nausea and vomiting from anticancer therapies and relieve symptoms such as fatigue, dry mouth and hot flashes within the realm of cancer treatment.

Reflexology

- Involves gentle pressure on specific points on feet, hands or ears
- Useful for anxiety, pain during labour, arthritis pain, emotional and physical pain caused by cancer, sinus issues, back pain, constipation, stress, and improving mood.
- Stimulates the nervous system and improves nerve function.
- Helps to offset the way that your brain registers pain.
- As your nerve endings age, they become less sensitive. Applying pressure to the areas of your feet, hands, or ears that are connected with your nervous system will open and clean out neural pathways, helping to improve functionality and flexibility.

Reiki

- A Japanese technique for stress reduction and relaxation that treats the whole person and promotes healing.
- Reiki which is "life force energy "means "God's Wisdom or the Higher Power“ or “Spiritually guided life force energy”.
- Administered by "laying on hands"
- Based on the idea that a "life force energy" flows through us and is what causes us to be alive.
- Low life force energy =sick or feeling stress
- High life force energy=happy and healthy

Aromatherapy

- Enhances the parasympathetic response through the effects of touch and smell, encouraging relaxation at a deeper level.
- Increasingly, aromatherapy has been used as part of an integrated, multidisciplinary approach to pain management.
- This therapy is thought to enhance one's ability to relax and relaxation has been shown to alter perceptions of pain (Buckle 1999).

Massage Therapy

- Relaxation of the tense muscles can increase blood flow to the underlying tissues to decrease pain, reduce stress, promote muscle relaxation, lower blood pressure, and improve circulation.
- Can help improve posture and strengthen the body's immune system.

Massage Therapy (continued)

- In Cancer patients, massage can improve mood and quality of life:
 - in one study, both the massage and simple-touch groups had reported improvements in pain and quality of life over time,
 - there was an improvement in psychological well-being and in some cases, reduced severity of physical symptoms, and
 - depression and anxiety significantly improve with massage.

Positioning

- Maintaining a proper body alignment to reduce stress and anxiety, especially in children
- Helps to prevent further complications
- Reduces the risk of developing injuries
- Improve blood circulation which in turn can prevent pressure ulcers from developing
- Helps to relieve muscle pain, tension and discomfort
- Elevating extremities while positioning can be beneficial in decreasing pain and preventing edema as well

Heat and Cold Therapy Treatments

Heat and cold therapy have been used for many centuries to relieve pain.

Cold Therapy:

- Cold therapy involves applying a cool substance or device to any part of the body.
- Cold compresses may be used for between 15 and 30 minutes, up to 2 – 3 times per day.
- Helps to increase pain threshold, decrease edema, and suppress the inflammatory process.

Hot and Cold Treatments (continued)

Heat Therapy:

- Heat stimulates the thermoreceptors in the skin and deeper tissues which can help to reduce pain by closing the gating system in the spinal cord.
- Heat reduces striated muscle spasms by minimizing muscle spindle excitability and reducing tension in muscle trigger points.
- By warming joints, heat reduces the viscosity of synovial fluid, which alleviates painful stiffness during movement and increases joint range.
- Safe alternatives to minimize the risk of burns: wheat-based heat packs and electrical heating pads that cycle on and off automatically.

Transcutaneous Electrical Nerve Stimulation (TENS)

- Is a battery-powered device with 2 – 4 leads connected to sticky pads positioned over the skin to cover or surround the painful area.
- Delivers a low-voltage electrical impulse to the padded surface electrodes in a series of alternating electrical current impulses.
- It is thought that TENS produce analgesia by stimulating large afferent nerve fibres - the mechanism includes activation of descending modulation systems and blocking of sympathetic outflow.
- When the TENS unit is turned on, the patient feels a light tingling sensation over the area where the pads are placed.

TENS (continued)

- TENS is virtually free from side effects.
- The unit can be attached to the patient's belt for ease of use and mobility.
- It can help patients with chronic back pain, arthritis, and neuropathic pain along with patients with mild to moderate acute pain.
- TENS should not be used in patients with cardiac pacemakers or a history of cardiac dysrhythmia.

Distraction

- Engaging in thoughts or activities that distract attention from pain is one of the most commonly used and highly endorsed strategies for controlling pain.
- The process of distraction appears to involve competition for attention between a highly salient sensation (pain) and consciously directed focus on some other information-processing activity.
- There is doubt about its effectiveness as a clinical tool, and results from both experimental and clinical studies remain inconclusive. Recent theoretical advancements suggest that distraction of attention may be less effective when pain is threatening.

Relaxation Techniques

- Relaxation techniques are practices to help bring about the body's “relaxation response” which is characterized by slower breathing, lower blood pressure, and a reduced heart rate.
- The relaxation response is the opposite of the stress response.
- Some studies compare relaxation techniques to cognitive behavioural therapy.

Relaxation Techniques (continued)

- **Biofeedback:**
 - A technique that helps you learn how to control functions such as heartbeat, blood pressure, and muscle tension to reduce pain.
- **Guided Imagery:**
 - Also called visualization and is a technique in which you focus on positive scenes, pictures, or experiences to lower pain.

Relaxation Techniques (continued)

- **Meditation:**
 - Can help to relax your mind and body, which can improve your overall sense of well-being and lower pain.
- **Breathing Exercises:**
 - For breathing exercises, you focus on taking slow, deep breaths - also called diaphragmatic breathing.
- **Hypnosis:**
 - Is a trance-like state of deep relaxation that can be used to relieve pain.

Relaxation Techniques (continued)

- Some relaxation techniques may help children and adolescents with pain, anxiety, depression, headaches, or difficulty with needle-related procedures.
- Much of the supporting research was rated as low quality, so we don't have a completely clear picture yet of the possible benefits.
- A 2017 review on recurrent abdominal pain in children and adolescents found that guided imagery and hypnotherapy may be helpful in reducing pain in the short term, but the quality of the research was low.

[Relaxation Techniques: What You Need To Know | NCCIH \(nih.gov\)](#)

Relaxation Techniques (continued)

- Relaxation techniques are generally considered safe for healthy people.
- In most research studies, there have been no reported negative side effects.
- However, occasionally, people report negative experiences such as increased anxiety, intrusive thoughts, or fear of losing control.
- There have been rare reports that certain relaxation techniques might cause or worsen symptoms in people with epilepsy or certain psychiatric conditions, or with a history of abuse or trauma.

Relaxation Techniques (continued)

- Relaxation techniques might help with pain after surgery, headache, low-back pain, and arthritis-related pain.
- In 2017, the Society for Integrative Oncology updated its clinical practice guidelines on using integrative therapies during and after breast cancer treatment:
 - Relaxation techniques were recommended for improving mood and depression.
 - Relaxation techniques might help to reduce stress and anxiety and help to control nausea and vomiting during chemotherapy.

WHY

Non-pharmacological Management: *Why*



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Why are non-pharmacological interventions important?

- They do not conceal symptoms but rather address the source of the pain.
- Pain is an extremely complex phenomenon that involves multiple cascades of behavioural responses, thoughts, and emotions.
- Some non-physiologic factors (i.e. psychological, familial and societal attitudes, life stressors, and cultural, spiritual and religious beliefs) contribute significantly to how individuals experience and respond to pain.
- Emotional distress, specifically depression and anxiety, plays a vital role in pain experience.

Why are non-pharmacological interventions important?

- Generally, these approaches are relatively inexpensive with a high safety profile and low side effects.
- Some non-pharmacological therapies have an increasingly important role in providing holistic patient care alongside pharmacological interventions.
- While medical drugs are used for treating the somatic (physiological and emotional) dimension of the pain, non-pharmacological therapies aim to treat the cognitive, affective, behavioural and socio-cultural dimensions of the pain.

Let's Not Forget

Religious, spiritual and cultural beliefs can help some people accept their own illness and help to explain illness to others.

Religious or spiritual practices can provide the client, the family, and even the healthcare professionals with a sense of strength, security, meaning, and faith during a time of need.

Let's Not Forget

Encourage open and honest discussions between patients and health care providers about any complementary, alternative, or non-pharmacological interventions that are being used.

Ensure any severe or long-lasting symptoms are investigated by an appropriate health care professional.

CASE STUDIES

Case Studies



BY
Pallium Canada



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Case Study – Let's Meet Judy

- 32 year old female
- Single mom of 2 children, ages 6 and 4
- Diagnosed with stage 4 breast cancer within the last year
- Has had a radical mastectomy of the right breast with complete lymph node dissection and radiation treatment
- Is currently undergoing chemotherapy
- Her ESAS scores of note are:
 - Nausea – 8/10
 - Pain – 8/10
 - Overall wellbeing – 10/10

Case Study – Judy

- Lets consider some of the possible non-pharmacological interventions to assist with pain control: acupuncture, aromatherapy, music therapy, massage
- Consider the above treatment modalities in relationship to:
 - How could Judy incorporate this treatment into her routine
 - What barriers/limitations could be present that would impact its success or use?

Case Study – Let's Meet Gina

- 48 year old woman, diagnosed with mental illness and is morbidly obese
- She comes into the Emergency department frequently by ambulance, usually in the middle of the night, complaining of pain and always wearing sunglasses
- Gina lives alone and has no family physician
- Has pain that is not well described, only that “I am sore all over” and is mainly in her joints (not just one joint but all of her joints)

Case Study – Let's Meet Gina

- During her previous visits to the ER she has been aggressive verbally and physically with the staff
- Gina has been labelled a “frequent flyer who is drug seeking.”

Unfortunately Gina's medical treatment in the ER is not optimum and is usually discharged with little investigation or treatment. She currently does not have anyone who can advocate for her.

Case Study – Gina

During this visit to the ER, Gina told the nurse during her assessment that “no one understands the pain I am in” and “I have had it for over a year”.

Gina cursed at the nurse when she attempted to place the BP cuff which caused an exaggerated pain response and would not allow the nurse to cover her with a sheet screaming in pain with the attempt. She says “I don’t know why I come here, you people never listen! You never do anything. All you people ever do is tell me to use heat or ice. Don’t you know that causes me more pain?”

Gina admits to feeling tired all the time and that she awakes frequently in the night. When the nurse inquires about the sunglasses and if she is having a headache, she tells the nurse that the bright lights bother her eyes.

Questions?

We hope you enjoyed today's session. Please remember to complete the satisfaction survey.



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[Non-Pharmacological Pain Management | IntechOpen](#)

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