Symptom Management

GENERAL PRINCIPLES

Symptom = any functional evidence of disease or of a person's condition
Pain = an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.[1]

INTRODUCTION

Most individuals living with HIV/AIDS suffer significantly from multiple symptoms, including pain, that are the result of inter-related physiological, psychic changes, and the:

- variable and unpredictable nature of HIV/AIDS
- many concurrent, on-going opportunistic infections
- affects on numerous body systems
- major psycho-social stressors (remember the concept of "total pain/suffering)[2]
- multiple medications, drug interactions and side-effects

Symptoms, including pain, can:

- occur simultaneously
- affect one or more body function(s)/system(s) at a time
- produce excitation or depression
- lead to other symptoms

PREVALENCE

Data collected from two different study populations suggest the prevalence of symptoms in persons living with HIV/AIDS:

Casey House Hospice, Toronto[3]
(100 persons)

Symptom	Prevalence
Anorexia/weight loss	91%
Fatigue/weakness	77%
Pain	63%
Incontinence (urine/stool)	55%
Shortness of breath	48%
Confusion	43%
Nausea/GI upset	35%
Cough	34%
Anxiety/depression	32%
Visual loss	25%
Skin Breakdown	24%
Constipation	24%
Edema	23%
Psych. issues	18%
Skin problems	17%
Seizures	16%
Fever	13%
Potential for skin breakdown	6%
Dysphagia	4%
Agitation	1%

Multi-centre French National Study[4]
(314 persons)

Symptom	Prevalence
Pain	52%
Tiredness	50%
Anxiety	40%
Sleep Disturbance	37%
Mouth sore	33%
Sadness	32%
Weight loss	31%
Nausea	28%
Fever	27%
Cough	27%
Depression	24%
Diarrhea	24%
Skin problem	24%
Pruritis	23%
Respiratory Problem	22%
Vomiting	20%

ASSESSMENT

Symptoms, including pain, are often missed or under-estimated, especially in substance users.

Assessment should include:

- an accurate and thorough history and physical examination:
  - sit comfortably at the same eye level as the person you are talking to
  - use open ended questions
  - listen carefully
  - trust the person's assessment of their symptoms
  - observe facial expressions, body posture and ability to function and interact
  - individualize the use of appropriate measurement tools
- a comprehensive differential diagnosis
- investigations
- frequent reassessment

At all times assessment and investigations should be appropriate for the presentation, stage and context of the person and their illness.

Questions to assess symptoms, including pain, might include:

site	• where is the symptom/pain?
radiation	• does it spread anywhere?
timing	• how long have you had it? • does it come and go? • when it comes, how long does it last? • is it always there? • is there a particular time of the day that is better or worse?
quality	• describe the symptom in your own words
severity	• how severe is it? • on a scale of 0-5 or 0-10, how would you score its intensity/ severity (use visual analogue scale, if possible)?
aggravating factors	• what brings on the symptom/pain? • what makes it worse, i.e. movement, pressure, food? • do several symptoms impact on each other, i.e. pain, nausea, diarrhea, constipation, dyspnea, anxiety?
relieving factors	• is there anything you can do to decrease it?
impact on ADL	• does the symptom/pain disturb your sleep (especially pain)? • does it cause you to be depressed or discouraged? • how has it affected your activities, i.e. your job, recreation, sexual function, meal preparation, dressing, social life, hobbies, etc.?
previous therapy	• which medications or treatments, including complementary therapies, have you tried (ask for the dose, duration, frequency, route of administration)? • which were effective, which ineffective? • did you stop the medication or treatment? If so, why?
adverse effects	• did you experience any adverse or side-effects? If so, what?

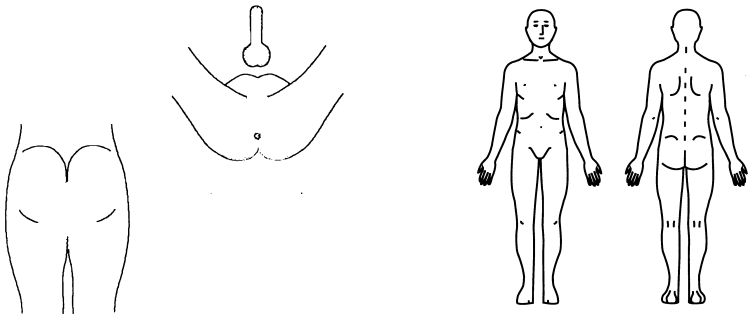
LOCATING THE PAIN[5] ▼

Ask patient to point to area of pain

你感到那處痛楚？

DOVE AVVERTE IL DOLORE?

आप को कहां दर्द होता है?



ONDE É A SUA DOR?

WHERE DOES IT HURT?

LIEU DE LA DOULEUR?

PAIN RATING SCALES[5] ▼

Show chart to patient and ask

你痛楚的程度有多大？

QUANTO È INTENSO IL DOLORE CHE PROVA?

आप का दर्द कितना गम्भीर है?

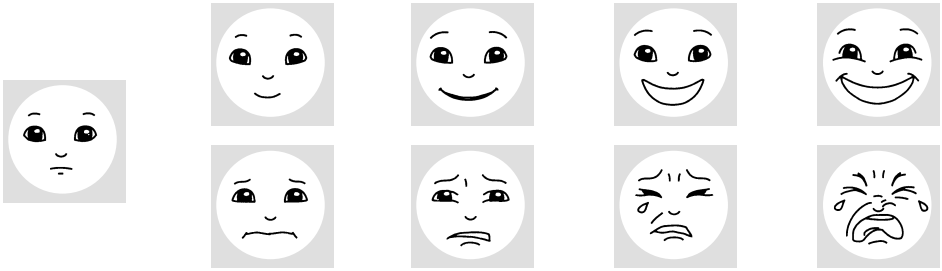
NO PAIN / AUCUNE DOULEUR / 無痛 / NESSUN DOLORE / NÀO HÁ DOR / कोई दर्द नहीं	0	1	2	3	4	5	6	7	8	9	10	WORST PAIN / DOULEUR EXTRÉME / 最痛 / NESSUN DOLORE / NÀO HÁ DOR / सब से अधिक दर्द

QUANTO DÓI?

HOW BAD DOES IT HURT?

INTENSITÉ DE LA DOULEUR?

PAIN RATING FOR CHILDREN 5 YEARS AND OVER[6] ▼



Children are asked to select the face which most closely resembles the distree felt by them during a specific painful procedure. This measurement is not used generally for chronic pain but for acute pain or discrete painful procedures such as injections, lumbar punctures, etc.

Combined with the visual analogue scale for correlation has been sucessful in children over one year of age for charting pain. Use the corresponding number below to chart the face.

5 4 3 2 1

6 7 8 9

MANAGEMENT

Symptoms, including pain, may be:[7]

- reversible if the cause can be treated, i.e. an infection
- non-reversible, if:
  - optimal treatment has already been tried and did not help
  - no direct treatment is available (this is the most relevant in HIV/AIDS)
  - not all treatment options have been accessed, i.e. complementary therapies

At all times, symptom management should strive to:

- be appropriate for the presentation, stage and context of the person and their illness
- enhance perceived "quality of life"
- control all existing symptoms
- offer comprehensive symptom management appropriate to the presentation, stage and context of the person and their illness
- treat the underlying cause(s), where appropriate (refer to *Modules 1–4*)
- anticipate and minimize other potential symptoms and treatment side-effects

As with all therapies, treatment strategies should be individualized and negotiated with each person and his/her family in advance, particularly as some will choose to live with their symptoms rather than risk side-effects from further treatment.

While many symptoms can be successfully managed by competent community care practitioners, as the complexity of the symptoms, medication schedules and potential for drug interactions increases, a skilled interdisciplinary team knowledgeable in various therapies is often required to either consult or take over care in order to achieve optimal results.

Co-ordination of prescribing is essential and can be achieved through collaboration of those prescribing, and the person living with HIV/AIDS, the family and the other caregivers.

ISSUES SPECIFIC TO PAIN[8,9]

PRESENTATION

Pain is:

- always subjective, i.e. what the person says it is and not what others think it ought to be
- an experience that results from the integration of nerve interconnections leading to (afferent) and from (efferent) the areas of the brain responsible for the perception of pain (thalamus and higher cortical centres).[10] The exact components of the nerve pathways, and the neurologic events that produce the experience of pain, are not totally known[9]

CAUSES

The pain that the person experiences:

- is most often initiated by normal stimulation of chemical, pressure, stretch and temperature receptors (nociceptors) found in varying proportions throughout the skin, blood vessels, muscles, connective tissues, periosteum (bone covering), joints, body organs, etc. (**nociceptive** or **visceral pain**)

Pain in HIV/AIDS French National Study (n=163)[4]	
Mechanism	**Prevalence**
Neuropathic	21%
Digestive	17%
Muscular	15%
Infectious	14%
Bone and joint	10%
Iatrogenic	4%
Psychogenic	3%
Tumour	1%
Unknown	5%

- is less frequently the result of abnormal (increased or decreased) nerve function or death. A reduced blood supply (ischemia), irritation, trauma, invasion by tumour or over stimulation may all lead to changes in the electro-chemical function of a nerve, loss of its insulating covering (myelin sheath) or nerve cell death (**neuropathic pain**)
- may be a mixture of nociceptive, visceral and/or neuropathic pains combined (**mixed pain**)
- is influenced by the person's emotions, sense of well-being and/or psychic distress, activity level, cultural and family expectations and experiences (**total pain**)
- may be made worse by movement, including sitting, standing, ambulating, bending, masticating, swallowing, breathing, urinating, and defecation (**movement pain**)
- may be associated with muscle spasm and/or a variety of other symptoms (associated symptoms)

CHARACTERISTICS

- pain may be constant or intermittent
- each person's description of their pain will vary based on past experience, culture, language, etc. The words used below exemplify those frequently chosen:

	Description	**Motor, sensory changes**	**Location**
Nociceptive	aching, gnawing, throbbing	normal cutaneous sensation and motor function	well localized
Visceral	aching, sharp, penetrating	normal cutaneous sensation and motor function	referred to the cutaneous sites that are characteristic of problems with the particular viscera
Neuropathic (nerve compression, irritation which may evolve into nerve damage	sharp, stabbing, "shooting electrical feeling"	usually normal cutaneous sensation, may be decreased motor function	local or distal to area of nerve irritation (dermatomal), more common/usually occurs in long nerve axons first
Neuropathic (nerve damage, infiltration)	burning, tingling, pins and needles	altered cutaneous sensation with hyperalgesia (allodynia) or hypoalgesia (numbness), may be decreased motor function	local and distal to area of nerve damage (dermatomal), more common/usually occurs in long nerve axons first

Allodynia = an area of altered sensation (decreased or enhanced) in an area of cutaneous sensory deficit during an activity or movement that is not normally painful, i.e. light touch of skin, bed sheets moving across legs

MANAGEMENT

The principles of pain management may be applied to the management of any symptom.

ESTABLISH TYPE OF PAIN

- establish whether nociceptive, visceral, neuropathic or mixed
- distinguish between rest and movement pain

USE MULTIPLE APPROACHES

- modify the disease, i.e. antivirals, antibiotics, chemotherapy, radiation therapy, surgery
- modify the perception of the pain, i.e. medications, education, massage therapy, psychological support, relaxation therapy, therapeutic touch
- modify or interrupt pain transmission pathways, i.e. transcutaneous electrical nerve stimulation (TENS), acupuncture, chiropractic, nerve blocks, neurosurgery
- modify lifestyle, i.e. occupational therapy assessment, physiotherapy, homemaking services

PROVIDE STEPWISE ANALGESIA

1. use analgesics in incremental steps. Keep it simple - become familiar with 1 or 2 medications in each step and know them well

Step	Analgesic
1. mild pain	• non-opioids, i.e. ASA, acetaminophen, NSAID's
2. moderate pain	• add a weak opioid, i.e. codeine to the non-opioids
3. severe pain	• replace the weak opioid with a strong opioid, i.e. morphine, hydromorphone, oxycodone, fentanyl, methadone

- don't mix agonists, use one at a time (except when using morphine or hydromorphone to manage breakthrough pain when Fentanyl patches are being used)
- avoid medications with potentially toxic metabolites that have a longer half-life than the parent compound, i.e. meperidine, anileridine
- avoid agonist-antagonists and medications with a high incidence of associated side-effects, i.e. pentazocine
- be aware of ceiling effects with weak opioids such as codeine (upper limit of effectiveness is 200-300 mg/24 hours) and the lack of ceiling effect with strong opioids
- convert from one analgesic to the next and from one route of administration to another using appropriate analgesic equivalents (taking into account the differences in first pass effects and active metabolites, see the *Medication Table, Appendix B*)
- minimize the number of different medications and the number of doses to be taken

ROUTE OF ADMINISTRATION

- **use the least invasive route of administration** i.e. oral tablets or liquids, sublingual, buccal mucosal, suppositories and avoid injections whenever possible
- in the last hours of life, the buccal mucosa is an effective route for administering concentrated liquid opioids. Rarely, parenteral injections or infusion may be preferable if the dose is too high to administer against the buccal mucosa

DOSING

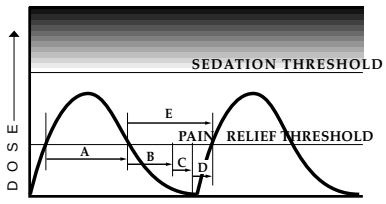
- provide "around the clock dosing" for constant pain at rest, following the basic rules of pharmacology. Never provide prn dosing alone for constant pain
  - initially provide routine doses of immediate release preparations once every half-life, i.e. q4h po or q3h sc for morphine, hydromorphone
  - wait 5 half-lives (until steady state) before increasing the routine dose
- provide breakthrough (prn) dosing for intermittent pain, i.e. extra pain, movement pain
  - initially offer one-half of the routine 4 hourly oral dose every 1 hour (or one-half of the routine 3 hourly sc dose every 30 minutes). Subsequently, increase or decrease the dose based on need
- titrate the dose of medications individually:
  - start at the lower end of the dosing range and work upwards
  - add recurring breakthrough doses into the routine dose once every 5 half-lives, i.e. once per day for most opioids
  - avoid combination medications that limit flexibility
  - never use sustained release products for titration or breakthrough doses
- once the 24 hour dose is stable, minimize the number of doses/day, by using:
  - sustained release preparations, unless there is severe constipation, bowel obstruction or a very rapid transit time, i.e. short bowel syndrome (never cut or crush sustained release tablets), or
  - long acting transdermal medication patches, i.e. Fentanyl (Duragesic®)
- modify the dosing interval for renal failure, particularly in the last hours of life

CONTINUOUS INFUSIONS

- consider a continuous parenteral infusion, preferably sc, only when the person:
  - is unable to swallow
  - is experiencing intractable nausea
  - has a very rapid transit time, i.e. severe diarrhea and may not be absorbing the medication well
  - has too much medication to swallow, i.e., >800-1,400 mg sustained release morphine q8h

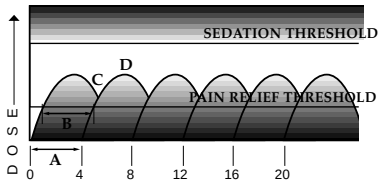
DOSING FOR OPTIMAL PAIN CONTROL[6]

▸ **NEVER PRN DOSING**



A. Pain free interval
B. Pain recurs - patient waits until "needs" to take again
C. Patient waits, after asking, until meds received
D. Patient waits for meds to be absorbed
E. Total time patient is in pain

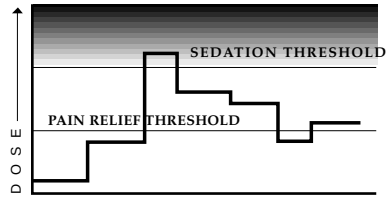
▸ **ALWAYS REGULAR DOSING**



A. Drug half life and frequency
B. Interval of pain relief
C. As one dose fails, the next is rising
D. Peak effect stays below sedation threshold

▸ **Incremental Titration**

Titration is upward over time until there is full pain relief. Once the pain is relieved, careful decreases may be tried if there are side effects.



  - is experiencing a bolus effect, i.e. toxicity after each dose (usually drowsiness) and pain before the next dose
  - has poor pain control and requires rapid titration
  - would otherwise use intermittent im or sc injections (iv infusions should be avoided due to increased tachyphylaxis)
- when changing the route of administration convert the dose appropriately, i.e. for either morphine or hydromorphone: po : parenteral (sc, iv, im) ≈ 2 : 1
- provide breakthrough (prn) dosing for intermittent pain, i.e. extra pain, movement pain
  - initially offer one-half of the routine 1 hour sc or iv dose every 30 minutes. Subsequently, increase or decrease the dose based on need
- sc infusions are safe even with extreme thrombocytopenia. Any bleeding usually occurs when the needle is removed. Apply pressure appropriately

POTENTIAL SIDE-EFFECTS

- anticipate and educate about potential side-effects, i.e. constipation, nausea/vomiting, dry mouth, drowsiness/sedation, confusion/delirium, urinary retention, twitches/jerks/myoclonus, respiratory depression (rare)
- be prepared to lower the opioid dose significantly if delirium presents along with fever/sepsis (delirium due to a relative opioid excess may be the first sign of sepsis, preceding even the fever)
- know how to manage opioid overdose:
  - if breathing rate is acceptable, hold further opioid, push fluids and wait for the metabolites to clear
  - if breathing rate is too low, administer naloxone appropriately (see *Appendix B, Medication Table*)

ADJUVANT MEDICATIONS

- consider NSAID's for inflammation or visceral pain i.e. arthritis, pleurisy, peritonitis, organomegaly with capsule stretch (ensure adequate cytoprotection, hydration, renal and platelet function)
- steroids may also have a role, but must be considered carefully in light of their potential to further suppress immune function in those who are already compromised
- nitrous oxide or ketamine (Ketalar®) may be useful for painful manoeuvres, movement or painful dressing changes
- see specific pain sections for other adjuvant therapies

COMPLEMENTARY THERAPIES

The holistic approach that is so much a part of Palliative Care has been integral to the "complementary therapies" for centuries. "Complementary therapies" include a variety of natural-based remedies and techniques (see page 32) and are often referred to as "alternative therapies" to indicate their distinction from standard medical practices. However, the term "complementary therapy"

emphasizes the fact that these remedies and techniques can be used in conjunction with allopathic, pharmaceutical treatments to lower medication dosages, reduce symptoms or side-effects or even substitute for other medications altogether. As favourable results have been suggested with a wide range of complementary therapies, you are encouraged to seek further information.[11]

EDUCATE

- provide ongoing teaching and support about:
  - choice of medications
  - dosing schedules
  - use of breakthroughs for routine vs. extra/movement pain
  - potential side-effects and strategies for their control
  - issues of addiction, dependence, and tolerance

CHILDREN

There are a number of issues in the management of symptoms, including pain, in infants and children which are different from adults, and require special consideration and consultation, when appropriate:

ASSESSMENT

- children do not complain in the same way as adults do
- the stage of cognitive development affects the expression and presence of symptoms and signs (and the understanding of treatment)
  - caregivers need to be educated about the interpretation of symptoms and signs
- observation may have to replace self-reporting in very young children who are unable to communicate effectively:
  - observational rating scales need to be age appropriate
  - a consistent caregiver should do the observations wherever possible
- children may have intense fears of separation and of procedures. This may affect assessment

MEDICATION ADMINISTRATION

- children may not be able to swallow pills or tolerate intramuscular injections
- many drugs are not commercially available in appropriate pediatric doses or dosage forms:
  - your pharmacy may be able to make special liquid preparations appropriate for your situation
- compliance may be a significant problem:
  - getting children to take oral medication may be difficult
  - developmental factors may lead to poor compliance
- myths about pharmacotherapy in children need to be dispelled to avoid under-treatment

DOSING

- the doses of most drugs need to be adjusted according to body weight
- immature metabolism in infants may necessitate lower dosages
- faster elimination may result in the need for relatively higher doses than in adults
- with some medications, idiosyncratic toxicity may occur in young children, i.e. valproic acid
- fixed-dose combinations may be best avoided if they do not allow for optimal dosing of each component medication
- experience with medications in children is often quite limited and the optimal dosing and range of toxicity may not be known

OTHER THERAPIES

- medication should be combined with other interventions including:
  - play, stories, games to refocus attention/distract
  - breathing/relaxation exercises
  - imagination/self-hypnosis to reduce pain

PERSONS LIVING WITH HEMOPHILIA AND HIV/AIDS[12, 13]

Hemophilia is a sex chromosome (X) linked genetic disorder resulting in reduced quantities or absence of specific blood clotting proteins:

- Hemophilia A = Factor VIII deficiency
- Hemophilia B = Factor IX deficiency

As a result, bleeding, generally into joints and muscles, occurs when there is minimal to severe trauma, or when surgery or an invasive procedure is performed. To stop the bleeding, missing clotting factors must be replaced by intravenous infusion of factor concentrates.

Between 1979 and 1985, 850 Canadians living with Hemophilia became infected with HIV through the use of concentrates manufactured from HIV infected blood. While blood donor screening and viral inactivation procedures virtually eliminated HIV from factor concentrates prepared in Canada by 1985, tragically in 1987, another 10 Canadian hemophiliacs were infected through imported factor concentrates that were contaminated. Since mid-1987, even though human plasma remains the source for concentrates of Factor IX and some of the Factor VIII (recombinant sources for Factor VIII are replacing the human sources), there have been no further reports of contamination or infection.

As Hemophilia is genetically transmitted through the X chromosome from mother (unaffected carrier) to son (affected), one or more male members of the family are likely to be affected. Given the penetration of the genetic defect, some families are living with, or have lost, several members of their family who have been infected with HIV/AIDS.

COMPLICATIONS

pain	• multiple bleeds into joints may lead to joint damage, arthritis and pain • ensure that pain is well controlled, encourage analgesics prior to activity (see Arthralgia/Myalgia-hemophilia and Bleeding-hemophilia)
bleeding	• when bleeding occurs, replacement factor must be given promptly and in adequate doses (see Bleeding-hemophilia)
impaired mobility	• impaired mobility can be due to: – bleeding into joints and muscles – joint deformity – arthritis – joint replacements – decreased muscle strength, weakness and fatigue • to improve mobility: – encourage the person to voice his/her own physical limitation related to activity – allow for adequate rest periods – organize a safe environment to promote independence and to prevent injury – provide appropriate assistive devices – ensure that available orthotic devices or special shoes are used when ambulating
other blood transmitted viruses	• the presence of Hepatitis B and C has seriously compromised the health of those living with hemophilia/HIV. A high frequency of liver impairment may be further complicated by cirrhosis or hepatoma and may have implications for the use of anti-retrovirals and other medications • the risk of bleeding may be increased further as the liver fails to produce other clotting factors and as the bone marrow fails to produce adequate platelets. Bleeding may occur spontaneously into mucous membranes, soft tissues and the brain.

To ensure optimal care of the patient with hemophilia and HIV/AIDS, close collaboration with the hemophilia comprehensive care centre must be maintained.

HIV+ SUBSTANCE USERS

When we discuss the client-centered care model, it is important to consider both harm reduction and options (see *HIV+ Substance Users in Palliative Care*) . Harm reduction within this model takes into consideration medication which will probably reduce the harm caused by other substances being used. The following examples may be taken into consideration:

	ISSUES FOR SUBSTANCE USERS	OPTIONS
opioids (codeine, morphine, heroin, hydromorphone, methadone, pentazocine)	• higher tolerance to morphine derivatives	• increase dose • shorten interval between doses (following principles of pharmacology) • choose a morphine derivative that acts selectively with other receptors, i.e. replace morphine with methadone (see below)
	• hepatic failure	• monitor dosages carefully to avoid overdosing and consequent side-effects
	• withdrawal	• treatment of symptoms (clonidine, benzodiazapines, anti-spasmodics, anti-inflammatories) • increase methadone by 10mg q 1-2 days until withdrawal symptoms disappear
	• drug interactions - phenytoin, rifampin and rifabuton (Mycobutin®) increase elimination of methadone	• increase methadone doses to compensate
	• drug interactions - simultaneous use of agonist and antagonist or agonist/antagonist, i.e. pentazocine, can rapidly provoke withdrawal symptoms	• avoid mixing medications
Benzodiazepines (Valium®, Librium®, Ativan®, Halcion®, etc.)	• higher tolerance to benzodiazepines	• increase dose • shorten interval between doses (following principles of pharmacology) • use longer-acting benzodiazepines
Alcohol	• cross-tolerance to benzodiazepines	• increase dose of benzodiazepines • shorten interval between doses of benzodiazepines (following principles of pharmacology) • use longer-acting benzodiazepines
	• hepatic failure	• the pharmacokinetics of certain medications can be altered. Adjust dosages and dosing intervals appropriately
Cocaine	• withdrawal	• use longer-acting benzodiazepines

	• hepatic failure	• the pharmacokinetics of certain medications can be altered. Adjust dosages and dosing intervals appropriately
	• withdrawal	• use benzodiazepines for acute withdrawal • bromocriptine or amantadine to reduce the craving
Methadone	• Methadone is a potent opioid analgesic that demonstrates incomplete cross tolerance with other Mu-opioid receptor agonist analgesics. Although there has been no research into the palliative use of methadone in the opioid tolerant person with pain and HIV/AIDS, conversion of the opioid tolerant person with cancer-related pain to methadone has suggested that methadone may represent an important therapeutic option for the management of this difficult problem.[14] It is strongly recommended that more research be conducted into the use of methadone in Palliative Care in an effort to provide an optimum quality of life by minimizing potentially harmful medications.	
Medicinal THC, (cannabis)	• although the use of cannibis satova is illegal, some who have used it previously, refuse to stop using it as they feel it reduces their nausea and stimulates their appetite, especially when these symptoms are problems in HIV/AIDS. Synthetic cannabinoids may provide effective alternatives (see *Symptom Management* – Anorexia/cachexia, Asthenia, and Nausea/vomiting/retching and *Appendix B, Mediciation Tabl*e)	

As can be seen by the above examples, choices and harm reduction strategies are available, though further research is necessary in order to effectively judge their merits.

OTHER SYMPTOM MANAGEMENT ISSUES

Symptoms other than pain share management issues similar to those for pain. Use the symptom management and medication tables as a reference guide to refresh your current knowledge and stimulate the acquisition of new treatment strategies, not as a cook book.

In the sections that follow:

- emphasis is placed on the management of adults. However, except as noted earlier in this section and in the text that follows, the overall strategies are similar for infants and children. You are also encouraged to refer to *Module 2: Infants, Children, Youth*
- when reviewing the lists of potential presentations and causes for each symptom, remember that many may be occurring/ present simultaneously
- multiple medications have been included with brief prescribing information. More detailed dosing information for adults, appropriate dosing for infants and children, potential side-effects and drug interactions may be found in the *Appendix B, Medication Table* and in the references
- For the most part suggestions for consultations have not been included. Become familiar with the resources in your area and consult them when needed.

COMPLEMENTARY THERAPIES

ACUPUNCTURE

Acupuncture is an ancient Chinese treatment involving the insertion of very fine sterile needles into the body at specific points according to meridian charts (pathways of energy). It is used by many people to control painful conditions such as headaches, arthritis and low back pain, as well as non-painful problems such as allergies and withdrawal symptoms when stopping drugs or cigarettes. Although often used on its own, it is more authentically used when it is part of an overall program of traditional Chinese medicine which incorporates an intricate theory and practice involving pulse diagnosis, balancing of element/ organ relationships, and the use of herbs.

AROMATHERAPY

Aromatherapy is the therapeutic use of natural oils extracted from flowers, seeds, roots and fruits. Aromatherapists are trained to choose an oil appropriate to the need, i.e. certain odours can relax, stimulate or help to alleviate depression. They are generally applied as part of a massage therapy session, used in the bath, or taken by inhalation.

CHIROPRACTIC

Chiropractic is a method of care which employs manipulation of the spine, pelvis and other articulating joints to restore mobility, ease pain and stimulate the body's own balancing of function. In addition to manipulation, practitioners may employ massage, stretching techniques, electrotherapy to facilitate the treatment.

HOMEOPATHY

Homeopathy is an approach to health based on the principles developed by Dr. Samuel Hahnemann in Germany in the 1790's. By administering very diluted doses of one of 2,000 natural substances which in their raw form would either cause , or in some way reflect the person's complaint, a re-balancing of energy is achieved which markedly alleviates the symptoms. Remedies can be prescribed for rapid, drug-free action on acute symptoms, or for more chronic or constitutional complaints. In both cases this approach recognizes the interaction of physical, emotional and spiritual components in health.

MASSAGE THERAPY

Massage therapy is a healing art comprised of specific techniques designed to promote circulation, enhance lymphatic flow and ease musculoskeletal pain. Treatments are either full-body or area-specific and generally involve the use of oils, creams or powder. Massage can help to maintain skin durability (particularly at pressure points over bony prominences), aid in respiration, allay symptoms of abdominal cramping and nausea, and above all, afford a relaxed sense of well-being.

SHIATSU

Shiatsu is a Japanese word meaning "finger pressure", although in actual treatments thumbs, palms and elbows are also used. It is based on the Chinese theory of medicine which identifies meridian lines which relate to the internal organs. According to the principles of Oriental medicine, when energy becomes blocked or sluggish, systemic imbalances and various symptoms can occur. By applying sustained pressure along the meridians, the Shiatsu therapist stimulates the body's healing abilities.

THERAPEUTIC TOUCH

Each person has localized energy fields which extend beyond the body. In health, life energy flows freely throughout the body. In disease, these energy fields get blocked or depleted. Through therapeutic touch techniques, the therapist "tunes into" blocked areas by detecting a change in temperature which indicates a blocked energy field. The therapist directs life energy into the person to restore balance within the body.