



End of life issues

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- Life begins with birth and ends with death. Patients' death is often viewed as **personal failure of the health personnel**.
- The family turns to the doctor for **support and assistance** during difficult times.
- To provide effective care doctors must reconcile with his or her own feelings about death and must understand the **phases of grieving & dying** and should be able to **recognize their manifestations**.

STAGES OF DYING

(DR. ELIZABETH KUBLER ROSS)



1. Denial

- The first reaction is denial. In this stage individuals believe the diagnosis is somehow mistaken, and cling to a false, preferable reality.

2. Anger

- When the individual recognizes that denial cannot continue, they become frustrated, especially at proximate individuals. Certain psychological responses of a person undergoing this phase would be: "Why me? It's not fair!"; "How can this happen to me?"; "Who is to blame?"; "Why would this happen?".

3. Bargaining

- The third stage involves the hope that the individual can avoid a cause of grief. Usually, the negotiation for an extended life is made in exchange for a reformed lifestyle. People facing less serious trauma can bargain or seek compromise. For instance: "I'd give anything to have him back." Or: "If only he'd come back to life, I'd promise to be a better person!"

4. Depression

- "I'm so sad, why bother with anything?"; "I'm going to die soon, so what's the point?"; "I miss my loved one, why go on?"

During the fourth stage, the individual despairs at the recognition of their mortality. In this state, the individual may become silent, refuse visitors and spend much of the time mournful and sullen.

5. Acceptance

- "It's going to be okay."; "I can't fight it; I may as well prepare for it."

In this last stage, individuals embrace mortality or inevitable future, or that of a loved one, or other tragic event. People dying may precede the survivors in this state, which typically comes with a calm, retrospective view for the individual, and a stable condition of emotions.

Grieving a lost serious relationship

- 1. Denial:** The person left behind is unable to admit that the relationship is over. He or she may continue to seek the former partner's attention.
- 2. Anger:** The partner left behind may blame the departing partner, or him/herself.
- 3. Bargaining:** The partner left behind may plead with a departing partner that the stimulus that provoked the breakup shall not be repeated. Example: "I can change. Please give me a chance." Alternatively, he/she may attempt to renegotiate the terms of the relationship.
- 4. Depression:** The partner left behind might feel discouraged that his or her bargaining plea did not convince the former partner to stay.
- 5. Acceptance:** Lastly, the partner abandons all efforts toward renewal of the relationship.

SIGNS OF APPROACHING DEATH

- Facial appearance.
- Changes in sight, speech, and hearing.
- Respiratory system.
- Circulatory system.
- Gastrointestinal system.
- Genitourinary system.
- Skin and musculoskeletal system.
- Central nervous system.

Facial appearance

- Facial muscle relax, cheeks become flaccid moving in and out with each breath. Facial structure may change so the dentures cannot be worn, mouth structure may collapse, loss of muscle tone & prominent cheeks, pale, sunken eyes.
- **CHANGES IN SIGHT, SPEECH, AND HEARING**-Sight gradually fails. Pupils fail to react to light. Eyes are sunken and half closed. Speech becomes increasingly difficult, confused. Loss of Hearing.

- **RESPIRATORY SYSTEM**-Respiration becomes irregular, rapid and shallow breath or very slow & more difficult due to the presence of secretions.
- **CIRCULATORY SYSTEM** -Circulatory changes cause alterations in the temperature, pulse and respiration. Radial pulse gradually fails. Usually the pulsations are seen even after the patient has stopped breathing.
- **GASTROINTESTINAL SYSTEM**.-Hiccups, nausea, vomiting, abdominal distensions are seen. The pharyngeal reflex disappears; the patient feels the inability/difficulty swallowing

- **DEATH RATTLE**-A rattling sound heard in throat caused by secretions that the patient cannot eliminate from respiratory system any longer.
- **GENITOURINARY SYSTEM**-Retention of urine, distention of the bladder, incontinence of urine and stool due to loss of sphincter control.
- **SKIN AND MUSCULOSKELETAL SYSTEM.**-The skin may become pale, cool and sweats a lot (cold sweats). Ears and nose are cold to touch. Skin is pale & mottled due to congestion of blood in the veins as a result of circulatory failure.

- **CENTRAL NERVOUS SYSTEM.**-Reflexes and pain are gradually lost. Patient may be restless due to lack of oxygen and due to raised body temperature, although the body surface is cool.

Definitions of death:

- Classical definition – cessation of heartbeat and breathing (cardiopulmonary death)
- „New” definition of death – the death of brain means the death of a person
- „New modified” definition of death – the death of brain stem

Signs of death

- Pallor mortis
- Algor mortis
- Rigor mortis
- Livor mortis
- Putrefaction
- Decomposition
- Skeletonization

Pallor mortis (paleness)

- Is the first stage of death
- Occurs almost immediately post-mortem
- Results from the cessation of capillary circulation throughout the body
- Gravity then causes the blood to sink down into the lower parts of the body, creating livor mortis

Algor mortis (coldness)

- The second stage of death
- It is the change of body temperature post mortem, until the ambient (surrounding) temperature is matched
- A measured rectal temperature can give some indication of the time of death (approx. 2C during the first hour and 1C per hour until the body nears ambient temp.) – forensic medicine

Rigor mortis (stiffness)

- The third stage of death; is caused by chemical changes in the muscles post mortem, which cause the limbs of the corpse to stiffen
- Usually occurs about 4 hours post mortem

Livor mortis („bluish color“)

- The fourth stage of death
- It is a setting of the blood in the lower portion of the body post mortem, causing a purplish red discoloration of the skin
- Starts in 20-30 minutes, but is usually not observable by the human eye until two hours after death; maximum lividity occurs between 8-12 hour after death

Putrefaction

- Fifth stage of death
- Decomposition of proteins, breakdown of the cohesiveness between tissues, liquefaction of most organs

CARE OF THE DYING PATIENT

✓ **Psychological support:**

The psychological need of a dying person can be summarized as the following:

- **Relief from loneliness, fear and depression.**
- **Maintenance of security, self confidence and dignity.**
- **Maintenance of hope.**
- **Meeting the spiritual needs according to one's religious customs.**

The dying person may be moved to a private room, or privacy is maintained by putting the screen, so that other patients may not be disturbed by the unpleasant sight and other disturbances.

End of life care:

✓ Problem associated with breathing:

The dying person who is **restless, apprehensive and short of breath** may be given:

- **Oxygen inhalation** to remove his discomfort.
- **Elevation** of the patient's head and shoulders may make breathing easier.
- Keep the room **well ventilated** and less crowded.
- Periodic **suctioning** may be necessary.

Problems associated with eating and drinking

- **Anorexia, nausea, and vomiting** are commonly seen in dying patients. **They are unable to take any form of food and if they manage, they are unable to digest the food.**
- The patient is unable to swallow even the sips of water poured in the mouth. Most of them may require **I.V fluids.**
- If they can tolerate the oral fluids, **sips of water is given with a teaspoon.** That will help the patient keep the mouth moist.
- Give frequent **oral hygiene.**
- **Apply emollients** to the dry lips.
- The **denture** are removed and kept safely.

❖ Other issues:

- **Constipation, retention of urine and incontinence of urine and stool** are common problems faced by the patient.
- **Bladder catheterization** has to be performed
- Thorough **skin and perineal care has to be made** to keep the patient clean and to prevent skin infections.

❖ Problems associated with immobility:

- Frequent **skin care** should be given with particular attention to the pressure point.
- Patient should be comfortably placed and their **position frequently changed in the bed (avoiding bedsores)**

Problems associated with the senses

- Since the patient loses sight, prior to giving any care to the patient, we should **touch** the patient and say what we are going to do.
- Since the hearing is retained longer, **speak only what is appropriate** (in the proximity of the patient)
- **Avoid whispering** anything in the patient's room.
- **Speak loudly enough** so that the patient may understand what is being done for him.
- Since the eyes are opened, **protect the eyes from corneal ulceration with protective ointment.**

Problems associated with rest and sleep

- Patient should **not be disturbed** while sleeping.
- The visitors should be instructed not to **disturb the patient during his rest.**
- Maintain **calm and quiet environment.**

Palliative care

“The goal of palliative care is to achieve the best possible quality of life through relief of suffering, control of symptoms, and restoration of functional capacity while remaining sensitive to personal, cultural, and religious values, beliefs, and practices”

Palliative care

Chronic disease management:

- To extend life and maximize comfort, function and quality of life

Palliative care:

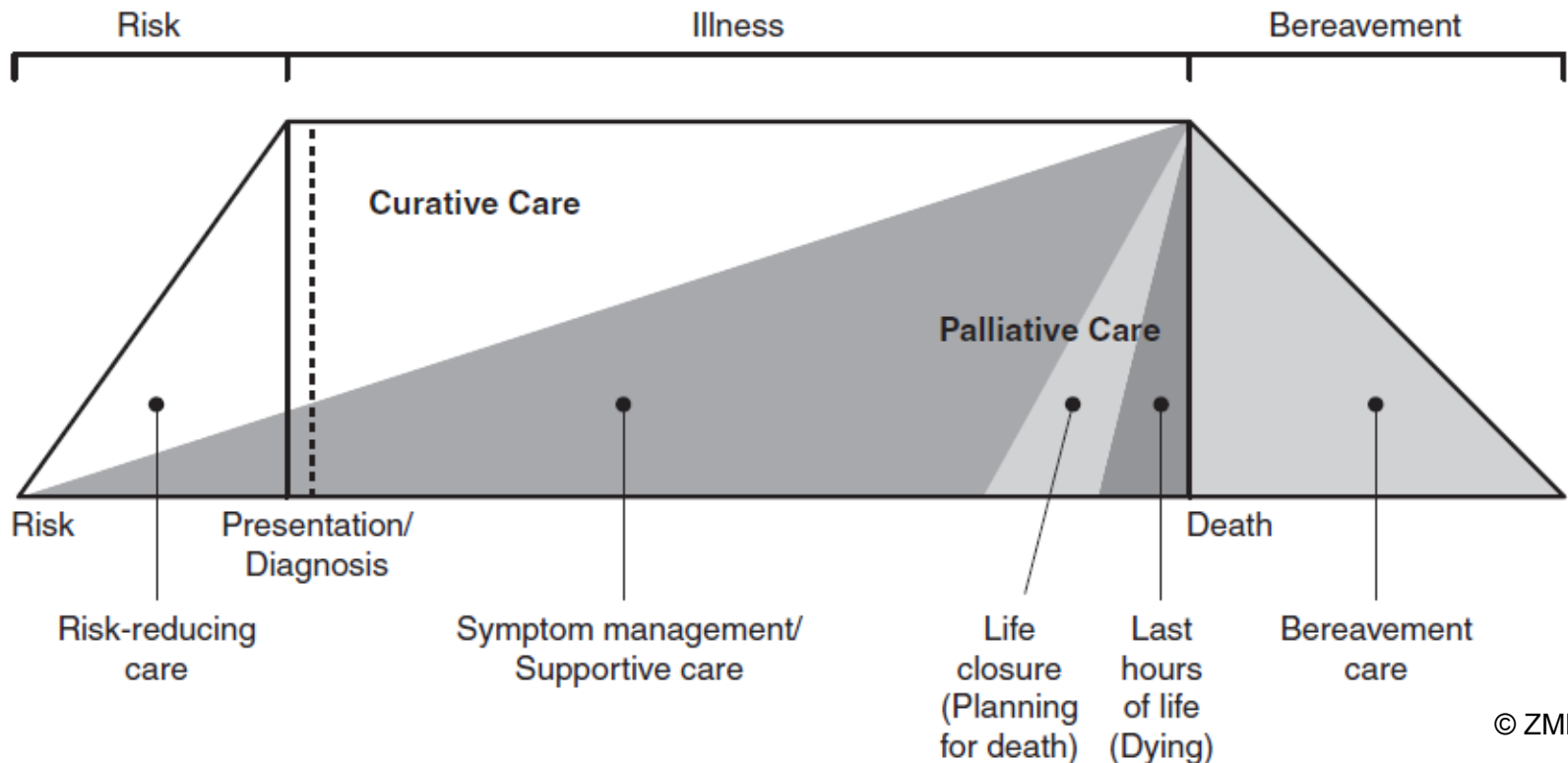
- quality of life is much more important than prolongation of life

Symptoms accompanied by dying process

- Pain – acute and chronic
- Dyspnea
- Nausea and vomiting
- Fatigue
- Constipation
- Anxiety
- Depression
- Delirium

Palliative Medicine Continuum of Care

Palliative Medicine's Continuum of Care



Assessment of common symptoms during palliative care

TABLE 24.2 Pain Assessment

Quality of pain: What does the pain feel like? What words would you use to describe it?

Severity: How bad is the pain? At its worst? At its best? Use rating scales (e.g., numerical scale from 1–10, or a scale that depicts facial expressions)

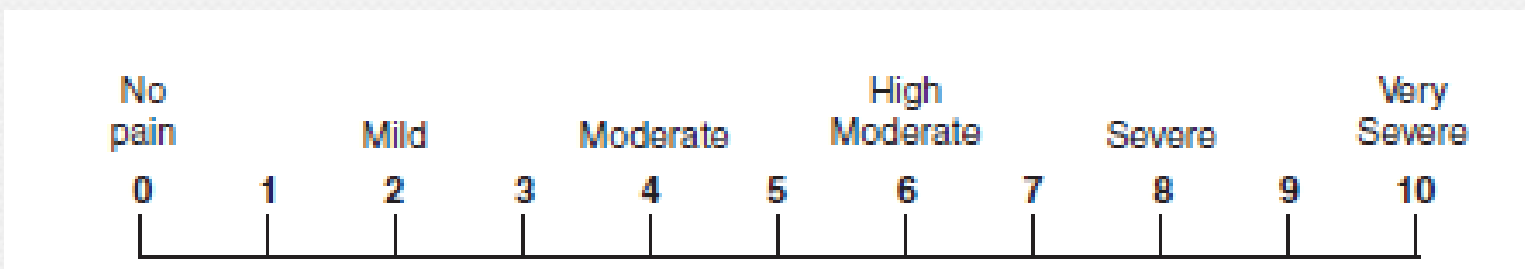
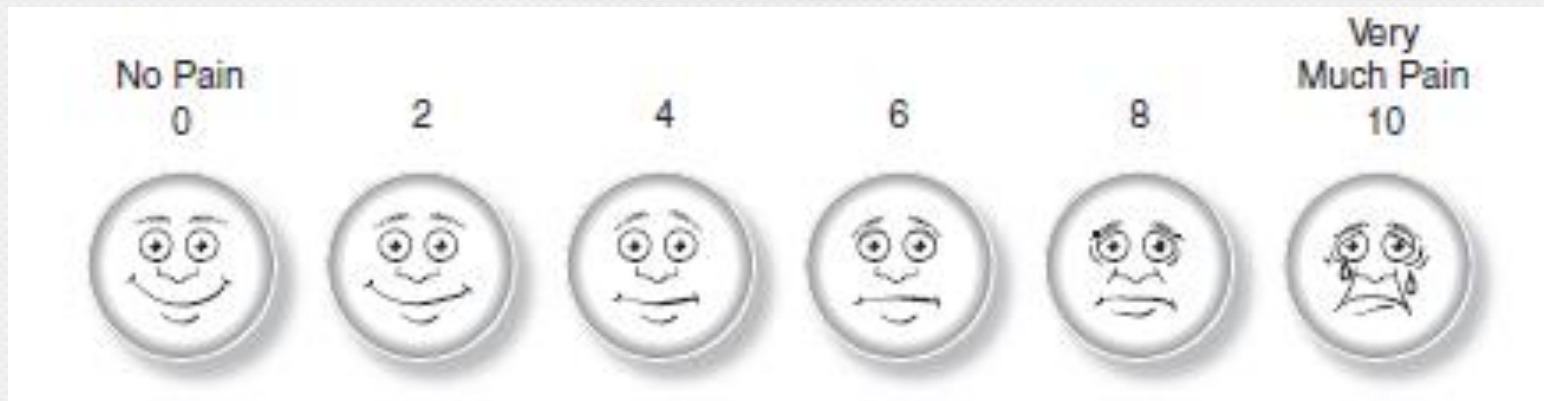
Temporal course: When did the pain start? How often does it hurt? Has it gotten better? Worse? Is it worse at certain times of the day?

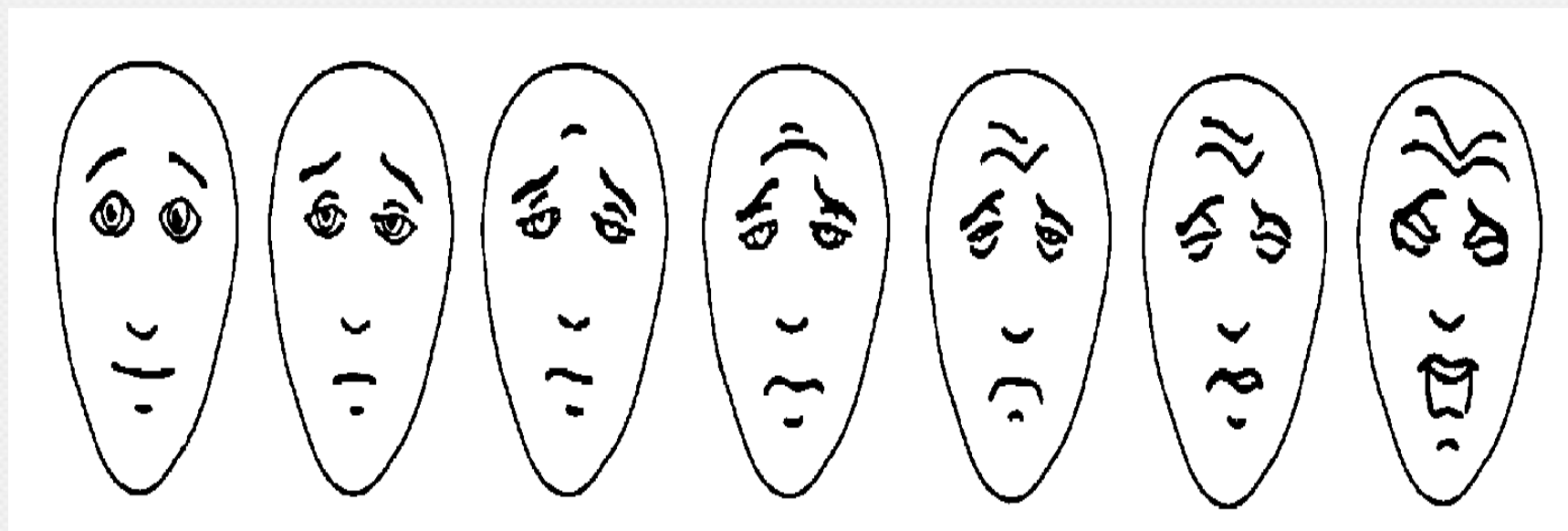
Radiation: Where is the pain? Does the pain go anywhere else? Does it spread? Can you put one finger in the center of the pain?

Provocative factors: What makes the pain worse? What brings it on? What aggravates it?

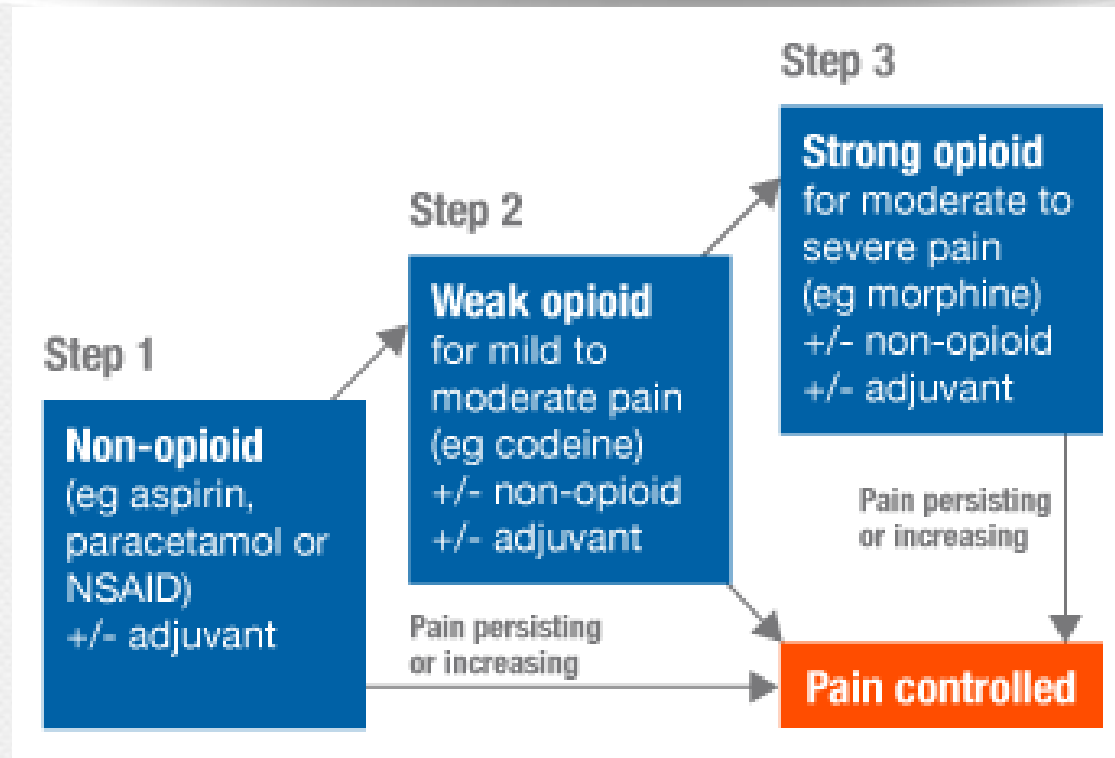
Palliating factors: What makes the pain better? What do you do to get relief? What helps you?

Treatment: What have you tried to relieve the pain? How effective was it? Why did you stop it?





WHO analgesic ladder for pain treatment



Adjuvant medications include steroids, anxiolytics, antidepressants, hypnotics, anticonvulsants, antiepileptic-like gabapentinoids (gabapentin and pregabalin), membrane stabilizers, sodium channel blockers, cannabinoids.

Figure 2. New adaptation of the analgesic ladder

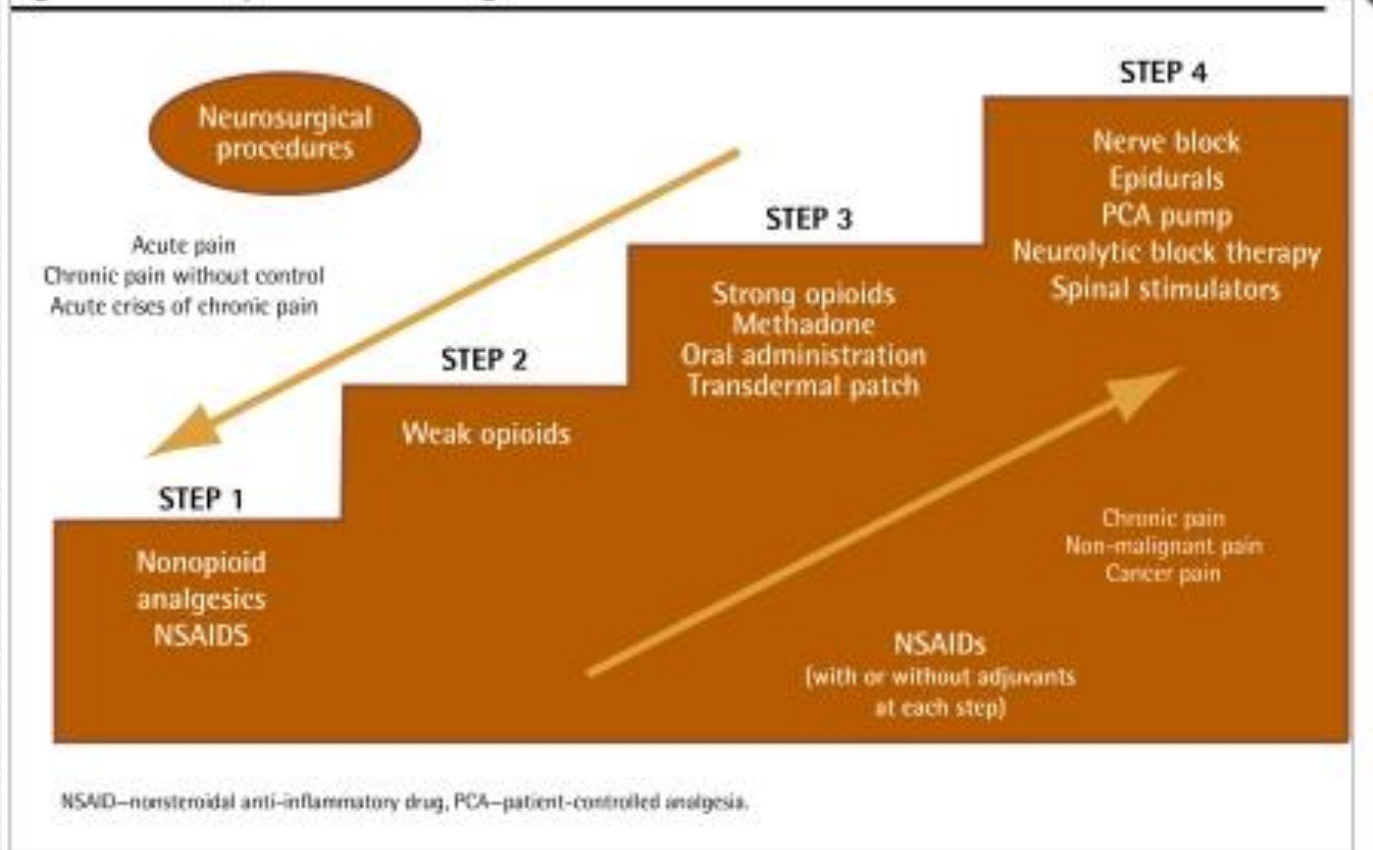


TABLE 24.5 Equianalgesic Doses of Opiate Analgesics*

Opiate Agonist	Oral	Parenteral	Dosing Interval
Morphine	30 mg	10 mg	q3–4h
Hydromorphone	7.5 mg	1.5 mg	q3–4h
Meperidine [†]	300 mg	75 mg	q2–3h
Methadone	10 mg	5 mg	q6–8h
Fentanyl	Variable [‡]	—	Patches, every 3 day [§]
Oxycodone	15 mg	N/A [#]	q3–4h
Codeine	120 mg	N/A	q3–4h
Hydrocodone	30 mg	N/A	q3–4h

Key therapies for symptom relief in palliative care

Symptom	Intervention	Strength of Recommendation*	Comments and Cautions
Pain	Physical and psychosocial interventions	B	Numerous modalities available as components of multimodal therapy. Caution: Exclusive reliance on complementary or alternative therapies may lead patients to forego curative or life-prolonging conventional treatments; a collaborative approach is advised.
	Acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs)	A	For mild pain, or as co-analgesic with opioid analgesics. Caution: Chronic or terminal illness may increase risk for acetaminophen induced hepatotoxicity or NSAID induced gastropathy and renal toxicity.
	Opioid analgesics	A	For moderate to severe pain. Multiple routes of delivery. Caution: Monitor for adverse effects, especially in opioid-naïve patients; treat preventively for constipation. Although risk of addiction is low in terminal illness, monitor for potential abuse or diversion.

Pain treatment:

Tricyclic antidepressants	A	Effective for neuropathic pain. Caution: amitriptyline has high risk of anticholinergic adverse effects; nortriptyline is equally efficacious but better tolerated.
Anticonvulsants	A	Effective for neuropathic pain; gabapentin best-studied. Caution: Risk of adverse effects greater in elderly or debilitated patients; start at low dose and titrate to effective dose. Reduce dosage if renal impairment.
Corticosteroids	C	Effective for bony metastases or tumor mass effect. Caution: Adverse effects with prolonged use; most advantageous with limited life expectancy or for short duration of therapy.
Radiation therapy	A	Effective for bony metastases or direct compression/obstruction from tumor mass. Caution: Substantial potential adverse effects; carefully consider benefits/burdens. Prognosis must be of sufficient duration to allow time to benefit from treatment.

Side effects of corticosteroids:

- Thin skin that bruises easily
- Muscle weakness
- Delayed wound healing
- Osteoporosis
- Diabetes
- High blood pressure
- Glaucoma and cataracts
- Stomach ulcers
- Mental health problems, such as depression, suicidal thoughts, anxiety, confusion and hallucinations
- Increased risk of infections (suppression of immune reactions)
- Rapid mood swings and mood changes
- Sodium retention (analogous to aldosterone) which can lead to hypertension

Dyspnea	Physical and psycho-social interventions	B	Relaxation therapies and simple measures such as an oscillating fan may reduce medication usage.
	Oxygen	B	Effective for symptomatic hypoxemia. Caution: Can be drying to nasal mucosa, and nasal prongs or face mask can be uncomfortable; titrate to comfort during active dying phase. Over-reliance on oximetry rather than direct observation of patient's comfort level increases likelihood oxygen will be used even when there is no palliative benefit.
	Opioids	A	Morphine is gold standard for dyspnea relief. Short-acting agents confer greater symptom relief than long-acting agents. Caution: Balance dyspnea relief with acceptable level of sedation. If sedated, monitor closely for respiratory depression.
	Diuretics	A	For relief of pulmonary congestion or to reduce ascites. Caution: Electrolyte derangements a possible adverse effect.

TABLE 24.6 Pharmacologic Management of Nausea

Cause	Drug Class	Recommended Agents and Dosage
Movement-related nausea	Antihistamine	Meclizine 25–50 mg orally every 6 hours Hydroxyzine 25–50 mg orally every 6 hours
Tumor-related elevated intracranial pressure	Glucocorticoids	Dexamethasone 6–20 mg orally once daily
Gastric stasis	Prokinetic agent	Metoclopramide 10–15 mg orally every 6 hours, 30 minutes before meals/food and at bedtime
Stimulation of chemoreceptor trigger zone (drugs, uremia)	Dopamine Serotonin antagonist	Prochlorperazine 5–20 mg orally every 6 hours, or 25 mg rectally every 12 hours, or 5–10 mg intravenously every 4 hours (maximum IV dose 40 mg/day) Promethazine 25 mg orally or rectally, or 12.5–25 mg intravenously, every 4–6 hours Haloperidol 0.5–2 mg orally, intravenously, or subcutaneously every 6 hours, then titrate Ondansetron 4–8 mg orally three times per day
Constipation	Laxative	See Table 24.7

Nausea and Vomiting	Metoclopramide	B	Has both promotility effect on GI tract and antidopaminergic effect in chemoreceptor trigger zone (CTZ). Caution: may cause extrapyramidal adverse effect.
	Phenothiazines	B	Caution: Higher adverse effect rate than metoclopramide.
	5-HT ₃ Receptor Antagonists (e.g., ondansetron)	B	Highly effective for chemotherapy or radiation therapy induced nausea. Caution: Very costly.

Symptom	Intervention	Strength of Recommendation*	Comments and Cautions
Fatigue	Cause-specific treatment	B	Treat electrolyte derangements, anemia, anorexia, etc. Diagnostic evaluation and treatments should be considered within context of prognosis, functional status, and goals of care.
	Corticosteroids	A	Dexamethasone, methylprednisolone. Caution: Weigh short-term therapeutic benefits against risk of adverse effects with prolonged use.
	Psychostimulants	C	Caffeine, methylphenidate, modafinil, dextroamphetamine. Start at low dose and titrate upward as needed. Typically given in morning and mid-day. Caution: monitor for adverse effects of appetite suppression, insomnia, agitation.

TABLE 24.7 Constipation Management

Treatment	Recommended Agent and Dosage	Comments
Stimulant laxatives	Prune juice 120–240 mL orally once or twice daily Senna 2 tablets or 5–10 mL of syrup orally at bedtime, titrate to effect Docusate 2 tablets orally at bedtime, titrate to effect Bisacodyl 5–15 mg orally or 10 mg suppository rectally at bedtime, titrate to effect	Irritates the bowel and stimulates peristalsis. Prolonged use can lead to laxative dependency and loss of normal bowel function.
Osmotic laxatives	Milk of magnesia 5–15 mL orally 1–3 times per day Lactulose 15–30 mL orally up to every 4–6 hours, then titrate to effect Magnesium citrate 1 (240 mL) orally as needed	Attracts water into the intestinal lumen, maintaining or increasing the moisture content and volume of the stool, distending the bowel, and inducing peristalsis. Use caution with magnesium containing products in patients with renal insufficiency.

Detergent laxatives (stool softeners)	<p>Docusate sodium 100 mg capsule orally daily, titrate to effect</p> <p>Docusate calcium 1–4 orally once daily, titrate to effect</p>	<p>Promotes water retention in stool. Most effective for hard stools.</p> <p>Onset of effect can take 3 days.</p> <p>For opiate-related constipation that does not respond to the above, use in combination with a stimulant laxative.</p>
Prokinetic agents	<p>Metoclopramide 10–20 mg orally every 6 hours</p>	<p>Stimulates the bowel's myenteric plexus, increasing peristalsis.</p>
Lubricant laxatives	<p>Mineral oil 5–30 mL at bedtime</p> <p>Glycerin suppositories</p>	<p>Lubricates intestinal mucosa and softens stool.</p>
Large-volume enemas	<p>Tap water enemas</p> <p>Soap suds enemas</p>	<p>Softens the stool and distend the bowel, inducing peristalsis.</p> <p>Soap suds function like a stimulant laxative.</p>
Opioid receptor antagonist	<p>Methylnaltrexone 8–12 mg subcutaneously every other day</p>	<p>Blocks opioid effect on <i>mu</i> receptors, but only minimally crosses blood–brain barrier so reverses constipating side effect without adversely affecting analgesia.</p>

Constipation	Dietary interventions	B	Increased dietary fiber and adequate hydration can improve laxation.
	Stool softeners	C	Should not be used as sole agent; use in conjunction with laxative.
	Laxatives	A	Initiate early in course of long-term opioids.
	Methylnaltrexone	B	Reverses opioid effects on gut without reversing analgesic effect. Caution: do not use in bowel obstruction.

Anxiety	Psychosocial interventions	A	Multiple anticipatory and responsive modalities; individualize to identifiable sources of anxiety.
	Benzodiazepines	A	Most effective when used with psychosocial interventions. Short-acting agents best for acute anxiety. Caution: habituation and tolerance are concerns; for long-term use, consider antidepressant as primary agent.
	Bupirone	B	Less habituating than benzodiazepines, fewer adverse effects in elderly. Caution: Less effective in patients with prior benzodiazepine treatment.
	SSRI antidepressants	A	Effective for long-term treatment.

Depression	Psychosocial interventions	B	Multiple modalities available; less evidence of effectiveness in end-of-life care.
	SSRI antidepressants	A	Effective, safe. Caution: May take weeks to achieve therapeutic effect; prognosis must be of sufficient duration to allow effect.
	Tricyclic antidepressants	A	Equally effective as SSRIs, less costly. Caution: Higher adverse effect rate. Greater risk if suicide attempted.
	SNRI antidepressants	B	Effective for depression, may also be effective for neuropathic pain.
	Other antidepressants	C	Mirtazapine effective for sleep disorder, comorbid anxiety, and as an appetite stimulant.

Delirium	Psychosocial interventions	C	Environmental changes to minimize disorientation key.
	Phenothiazines	A	Haloperidol gold standard, efficacy well documented. Caution: Regulatory limitations to use in long-term care setting.
	Atypical antipsychotics	B	Mixed evidence, but often helpful for patients needing a longer-acting agent. Caution: “Black Box” warnings about cardiac risks; for patients at the end-of-life, weigh risks and benefits.



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Breaking bad news

S-P-I-K-E-S Protocol

Goals of the SPIKES protocol:

- gathering information from the patient
- transmit medical information to the patient
- support the patient
- involve the patient to cooperate in the future

TABLE 24.3 SPIKES Protocol for Breaking Bad News**SET up the interview**

- Arrange to give potentially bad test results in person
- Arrange for privacy, adequate time, and no interruptions
- Involve significant others
- Sit down, establish rapport, allow for silence/tears
- Mentally rehearse and emotionally prepare for the interview

Assess the patient's PERCEPTION

- “Ask before you tell”—what does the patient know/understand
- Ask open-ended questions, tailor news to current understanding, correct misinformation, identify denial

Obtain the patient's INVITATION

- Most patients, but not all, want full disclosure
 - Discuss information disclosure at the time of ordering tests and before giving results
-

Give KNOWLEDGE (information) to the patient

- Warn the patient bad news is coming, e.g., “I’m sorry, but I have bad news” or “I’m sorry to tell you that . . .”
 - Target to the patient’s vocabulary/comprehension
 - Avoid euphemisms, technical jargon, and excess bluntness
 - Ask the patient to repeat back what you’ve said
 - Regardless of prognosis, identify goals—e.g., cure, pain and symptom relief, family issues
-

Address the patient's EMOTIONS with empathic responses

- Physicians are generally uncomfortable with patients’ emotional reactions to bad news
- Four components of an empathetic response:
 - Observe the patient’s emotion
 - Identify the emotion to yourself
 - Identify the reason for that emotion
 - Let the patient know that you have connected with that emotion

STRATEGIZE and SUMMARIZE

- A clear plan lessens the patient's anxiety and fosters patient self-determination
 - Ask if the patient is ready to discuss a plan
 - Use the patient's knowledge, expectations, and goals as a starting point; discuss fears; gently work past denial
 - Arrange follow-up meetings
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Thank you!

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